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ABSTRACT

This monograph attempts a partial description of the development of the competency-based counselor education (CBCE) program and the procedures used to promote that development. The first section describes the distinguishing features of CBCE. It notes differences from more traditional approaches, such as that under CBCE the evaluation focus is learner outcome, while traditional approaches tend to focus upon procedures used to promote desired student outcomes. The second section is concerned with the competency-identification procedures in CBCE. It describes some of the more common strategies for generating competency statements, and identifies the strengths and weaknesses of each approach. The third section deals with the design of instructional support systems and the development and implementation of procedures for competency assessment and program evaluation. The fourth section critically weighs the Competency-Based Learning Model. (PFS)

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Competency-Based Counselor Education: Designing, Implementing, and Evaluating Criterion Referenced Instruction

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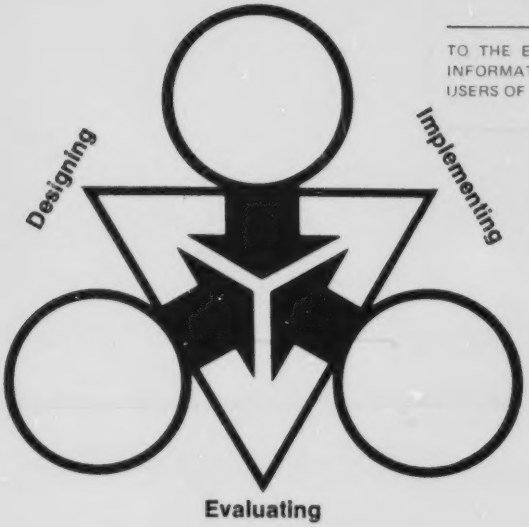

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Competency-Based Counselor Education: Designing, Implementing, and Evaluating Criterion Referenced Instruction

Edited by

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Bloomington, Indiana

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This volume reflects the creative and critical efforts of the countless persons who have been associated with the IU-IPS Pupil Personnel Services Training Satellite over the past four years. Significant among that body are the following: Craig Brubaker, Ron Baker, Ivor Davies, Frank DiSilvestro, Brenda Jackson, Bob Ingram, Peg Childs, Rob Ragatz, Marva Larrabee, each of whom contributed directly to this volume; Tom Smith, Billy Jo Minor, and Alexander Brown, each of whom served as Satellite director at some time over the four project years; the numerous students from the disciplines of counseling, school psychology, and social work who aided in the generation of ideas and models for training as well as in their implementation, evaluation, and subsequent revision; and lastly, faculty colleagues Darine Brown, DeWayne Kurpius, and Richard Pugh, each of whom contributed immeasurably through their verbal encouragement, their reactions to an evolving idea, and their communication of trust that this effort would some day be completed and bear fruit.

To the aforementioned and to the countless others who contributed in lesser ways, I extend my appreciation.

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TABLE OF CONTENTS

	Preface	1
I.	Features of Competency-Based Counselor Education *Thomas C. Froehle*	7
II.	A Systems Approach to the Designing of Instruction for Competency-Based Counselor Education *J. Craig Brubaker*	25
III.	Generating Competency Statements for Use in Counselor Education *Thomas C. Froehle*	41
IV.	Generation of Competency Statements Through Theory/Concept Analysis *Ronald D. Baker*	55
V.	Generation of Competency Statements Through Task Analysis *Ivor K. Davies*	65
VI.	Generation of Competency Statements Through Needs Assessment *Frank DiSilvestro*	75
VII.	Individualization, Humanization, and Social Change Concepts to be Considered in the Generation of Competencies *Brenda Jackson*	85
VIII.	Some Assessment Dimensions in Competency-Based Counselor Education *Thomas C. Froehle*	103
IX.	Development, Implementation, and Evaluation of a Competency-Based Learning Resources Center *Thomas C. Froehle, J. Craig Brubaker and Robert Ingram*	119
X.	Learning Center Handbook *J. Craig Brubaker and Peg Childs*	135

XI. A Model for Evaluation of Instruction in Competency-Based Counselor Education
Robert Ragatz 179

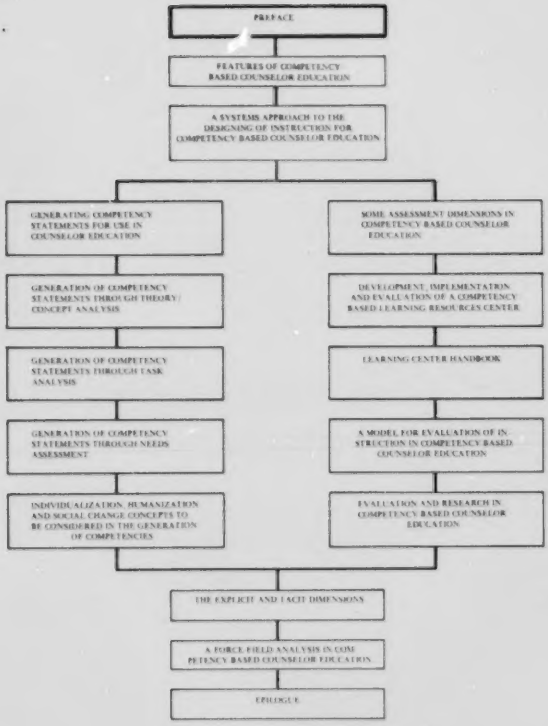
XII. Evaluation and Research in Competency-Based Counselor Education
Marva J. Larrabee 195

XIII. The Explicit and Tacit Dimensions
Ivor K. Davies 217

XIV. A Force-Field Analysis in Competency-Based Counselor Education
J. Craig Brubaker 233

Epilogue
Thomas C. Froehle and Sharon Robinson . 245

PREFACE


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
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THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Preface

Even the most cursory reading of the original proposal for the Indiana University-Indianapolis Public Schools PPS Training Satellite (Smith, Froehle, and Beebe, 1971)[1] suggests considerable faith in the Competency-Based Learning model. That faith is best summed up in the first of nine stated goals for the proposed project. It reads:

> "To create models for the identification, development, implementation, and evaluation of new professional competencies in the area of pupil personnel services."

Throughout the proposal, references are made to the need for "needs generated and outcome governed training programs" in the area of PPS, particularly for the Inner City. In our judgment, the competency-based learning model held the most promise for such an achievement and, therefore, deserved systematic trial and evaluation in the project.

We realized, of course, that competency-based counselor training was not a panacea to cure all the ills of society, or of the Inner City or even those of counselor education. Yet the model did seem to offer some guidelines for improvement in the training of PPS professionals. Furthermore, we knew in advance that such a program would not guarantee that all satellite graduates would be successful counselor/consultants; but we did believe that it offered the promise that a much higher percentage of our trainees would be equipped with the knowledge, the attitudes, the behavioral and the judgmental skills required for successful performance in the field (Arends, *et al.*, 1972).[2]

What we attempt in this monograph is a partial description of the competency-based counselor education (CBCE) program as it developed over the duration of the project's life and the

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[1]Smith, T., Froehle, T., and Beebe, R. IU-IPS Satellite training project for PPS. Indiana University. 1971.

[2]Arends, R. L., Masla, J. A., and Weber, W. A. *Handbook for the development of instructional modules in competency-based teacher education programs.* Buffalo, N.Y.: The Center for the Study of Teaching, 1973.

procedures used to promote that development. The first section begins with a description of the distinguishing features of the counselor/consultant training program. Differences between CBCE and more traditional approaches are noted, especially those differences which emanate from the focus for evaluation. Under CBCE the evaluation focus is learner outcome, while the more traditional approach tends to focus upon procedures used to promote desired student outcomes.

In the second paper, Craig Brubaker considers some systems concepts and applies several of these in the development of a model for instruction in CBCE.

The second section of this monograph focuses upon the competency-identification procedures in CBCE. The first paper describes some of the more common strategies for generating competency statements. Strengths and weaknesses of each approach are identified. Lastly, a "knowledge, behavioral skill, judgment" scheme is proposed for competency classification.

The three papers which follow describe in more detail the "theory/concept analysis," "task analysis," and "needs assessment" approaches to competency identification. The papers are authored by Ron Baker, Ivor Davies, and Frank DiSilvestro respectively.

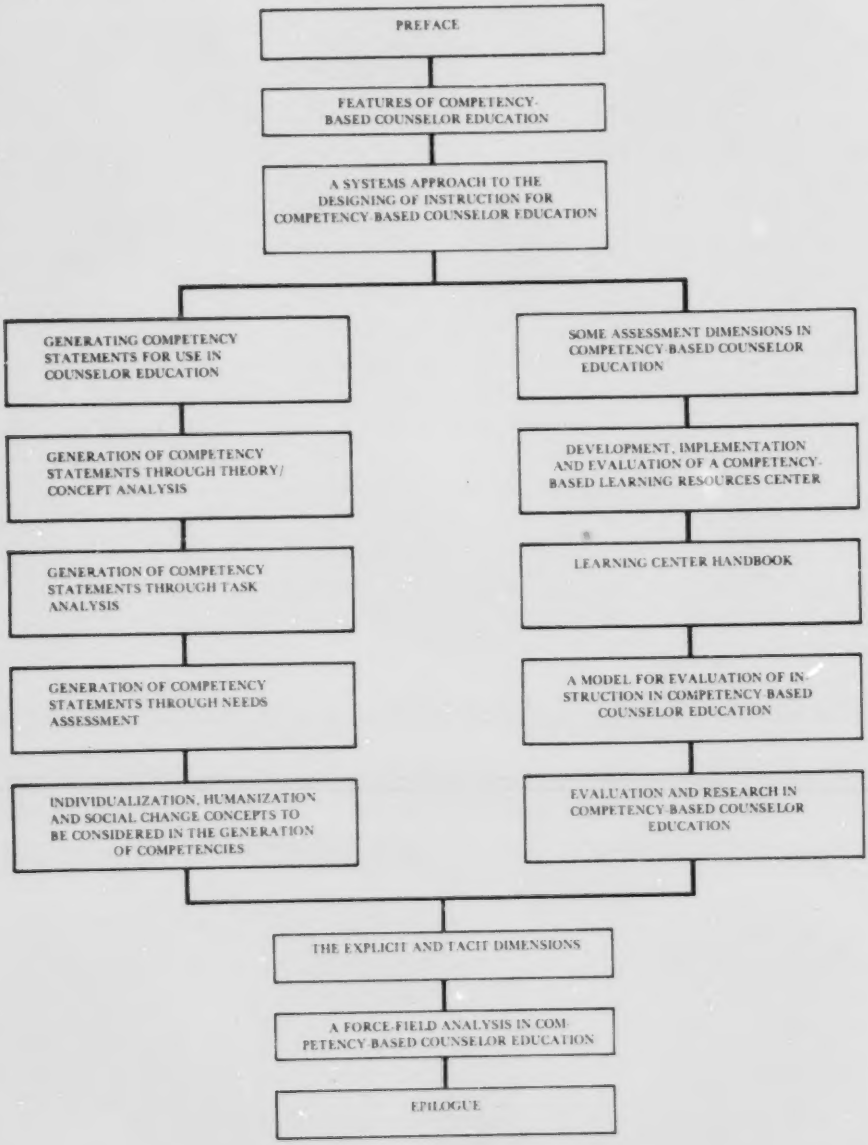
In a final paper of this section, Brenda Jackson, a program assistant from the Department of History and Philosophy of Education, analyzes CBCE—particularly its various approaches to the identification of relevant competencies—from the perspective of personalization, humanization, and social change.

The third section of this monograph deals with the design of instructional support systems and the development and implementation of procedures for competency assessment and program evaluation. The first paper describes several assessment dimensions which must be considered in the development of assessment and credentialing procedures in CBCE. The dimensions of measurement referencing, level of training, criterion classification, assessment context, and credentialing agent are separately considered. The paper which follows focuses on the rationale, design, implementation, and evaluation of a Competency-Based Learning (CBL) Resources Center which was

developed to facilitate management of the Satellite's training program. An exemplar product of that effort, a manual developed by Craig Brubaker and Peg Childs, graduate students, who served as program assistants to the CBL enterprise is presented next. This section should be of particular value to anyone who is thinking about setting up some type of learning resources center. In the next paper, Rob Ragatz describes a model for evaluating Competency-Based Learning. The model focuses on the relevance, effectiveness, and efficiency of the learning experience, in terms of selection, attainment, and assessment of competencies. In addition, potential validation procedures involving follow-up assessment are considered. In the final paper of this section, Marva Larrabee examines the relationship of research to evaluation within the framework of CBCE. Most importantly, she advocates the practitioner-scientist role for all in-the-field professionals until the relationships between counselor performance and client outcome are established.

In part four of this report, the CBL model and its future prospects are critically weighed by professionals representing two distinct disciplines. In the first paper, Ivor Davies, a British psychologist in the area of instructional systems, discusses the considerable challenge which the "tacit dimension" poses to proponents of the CBCE model. What does it offer, he asks, in that other dimension of knowing, the "tacit dimension?" In the final paper, Craig Brubaker suggests the Lewinian Force-Field Analysis procedure as a useful method for sorting out the forces which are driving and those which are restraining the further development of competency-based learning and criterion referenced instruction. His is a fitting admonition upon which to terminate this section of the monograph.

To assist you in ordering the papers which follow, we have designed a master graphic which illustrates the relationships among the separate papers. The master graphic appears below. In addition, a separate graphic precedes each of the separate papers. On each of the individual graphics the relative position of the paper to follow is highlighted with a darkened margin.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A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY-BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY-BASED COUNSELOR EDUCATION
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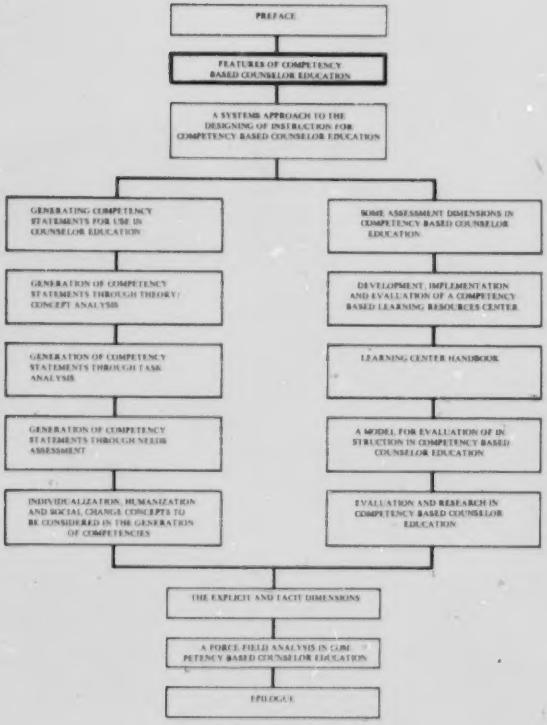
Features of Competency-Based Counselor Training

Thomas C. Froehle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A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
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EPILOGUE

Features of Competency-Based Counselor Training[1]

Thomas C. Froehle
Indiana University

Competency-based learning is an educational approach that focuses on the competencies required for successful performances, not the procedures employed to develop those competencies. More specifically, competency-based learning is an educational strategy characterized by the special emphasis it places on the following efforts:

1. The specification of education goals explicitly in terms of the *competencies* students are expected to acquire;
2. The development of procedures for *assessing* individuals and awarding credentials for mastery of these *competencies*; and
3. The design and development of education experiences directly related to the *attainment* of these *competencies* (HEW, 1973).

Simply stated, a competency-based counselor education program is one which explicitly designates the competencies that a prospective counselor must acquire, defines the criteria that are applied in assessing these competencies, and holds the prospective counselor (or trainee) accountable for meeting those criteria. The specified competencies are delineated into specific objectives which identify what a prospective counselor will be like, what he/she will be able to do, and how he/she will be able to function in the day-to-day world of counseling.

Competency Specification

In order to explicitly specify the educational goals in terms of the competencies that learners are expected to acquire, it is generally recognized that the first and most fundamental task of competency-based learning is the formation of competency objectives. At least six approaches to the identification and

[1]This paper was first presented at the Annual Meeting of the American Personnel and Guidance Association, New Orleans, March, 1974.

explication of counselor competencies are found in the literature. One of the better known descriptions of approaches to competency identification has been presented by Houston *et al.* (1971). They identify six approaches to competency generation: 1) program translation, 2) task analysis, 3) needs assessment, 4) cluster approach, 5) theoretical position, and 6) child-centered.

With the program translation approach, you simply reformulate current courses into competency-based terms (e.g., rewrite learning objectives).

Under the task analysis approach, competent counselors in various work settings are observed in the act of counseling. Counselors may be asked to maintain a daily log or running diary, and to then reconstruct their daily activities in order to identify major competencies which they feel are necessary and/or contribute to their performance of these activities.

Using the needs assessment approach, the needs of society or the needs of a particular school, community, or population subculture are assessed. Based on these data, training objectives are derived deductively.

With the cluster approach, several curriculum areas are identified, which serve as the building blocks for counselor training. Competency clusters are then broken down into competencies, and then into competency components, and then into behavioral objectives.

Under a theory directed approach, a theoretical position is assumed and through a deductive approach competencies for the "effective counselor" are generated.

The last approach described by Houston *et al.*, the child-centered approach, involves analyzing children and the school and curriculum goals for the children. This information is then used to determine what children should be like and to identify the competencies needed to bring children to this ideal.

Close inspection reveals that the approaches described by Houston *et al.* are not discrete nor are they categorized in any systematic fashion. In practice, elements of each approach creep into any sustained effort to identify and explicate

successful he is in effecting desired client change through the use of these counseling procedures.

Affective-based objectives focus on how the counselor trainee feels about something. Of greatest importance here is increasing the probability that a counselor trainee will perform in a certain way by focusing on what he would like to do or what he actually does when given the choice in a situation.

Performance-based objectives emphasize the counselor's ability to draw on information, data, knowledge, and understanding in order to demonstrate or use a wide variety of competency statements. In the later section of this paper, we attempt a different ordering of the approaches and some slight modification in their respective definitions. And finally, we point to some possible programatic advantages and disadvantages of each approach.

Regardless of what approach a program takes to identify and formulate competency statements, the competency-based learning model demands that the end product include precise statements of measurable objectives. The objectives that are generated through these procedures are categorized either as outcome objectives (that is, criteria-referenced objectives which require that a specific predetermined outcome be demonstrated—or as process objectives (that is, activity-referenced objectives which demand that a prospective counselor experience a specific event without specifying the outcome). Criteria-referenced objectives are the substance of CBL. Activity-referenced objectives, on the other hand, are legitimate only as long as they are thought to hold promise for significant learning or change even though specific expected outcomes from the experience may not be identifiable in advance. For example, a process- or activity-referenced objective might be that a counselor trainee is required to visit the homes of at least two of his clients before midsemester. The result, either negative or positive, is not stressed; only the act of doing it is emphasized. These differences are highlighted in Figure 1 below.

Process Objectives	Outcome Objectives
State Objective	*State Objective*
Activities to be undertaken are clearly specified.	The outcome of the activity is clearly specified.
(Criteria referenced activities)	(Criteria referenced outcomes)
1.0	1.0
Instigate Activity	*Instigate Activity*
Activity must meet criteria specified by objectives.	Form of activity is not specified by the objectives.
2.0	2.0
Observe Outcomes	*Observe Outcomes*
Outcomes are not specified by the objectives. They may be cognitive, affective, performance, or consequence outcomes.	Outcomes must meet the criteria specified by the objectives. They may be cognitive, affective, performance, or consequence outcomes.
3.0	3.0

Figure 1. Focus for evaluation for process objectives and for outcome objectives

Outcome or criteria-referenced objectives are further classified according to the type of criteria applied to determine whether or not the objective has been achieved. Four types of outcome objectives receive variable emphasis in competency-based counselor education. These include *cognitive objectives*, which specify the knowledge and understanding that is to be demonstrated; *affective objectives*, which describe the awareness and attitudes that are to be displayed; *performance objectives*, which require that certain actions be performed; and *consequence objectives*, which specify changes in others that the prospective counselor should be able to accomplish.

A more exacting consideration of criteria-referenced objectives reveals that cognitive-based objectives specify the knowledge, intellectual abilities, and information or data which the counselor is expected to demonstrate or in some way show evidence of having acquired. Cognitive-based objectives emphasize what the counselor knows about counseling, not how well he can perform the acts that go into counseling, nor how

counselor prescribed behavior under specified conditions, whether real or simulated. Examples of such situations would be requiring a counselor trainee to use open-end leads under pre-specified conditions in a ten-minute microcounseling situation, to interpret accurately a student's score profile on an academic achievement test to a parent during a conference, or to reward clients according to pre-specified contingencies. In any of the above examples, the "live performance" becomes the major focus. Questions that would be asked of such performance are: "Did the counselor, in fact, use open-end leads to the satisfaction of some pre-specified criteria?", "Was the verbal interpretation of the test score profile an accurate one?", or "Did the person administer and withhold rewards according to some pre-specified contingency (e.g., ten minutes of Monday Night football on TV for every ten minutes of practice on the saxophone?)" In none of the examples does the counselor educator question the effect of the trainee's performance on someone else; rather, the educator seeks to assess the live performance of the trainee independent of any consideration of the effect of that performance.

The fourth type of objective, consequence-based objectives, focuses on the counselor's ability to bring about change in others. Assessment, therefore, is based not upon what the counselor knows or is able to do, but upon the results of his knowing and doing—results which are demonstrated through change in someone else. In other words, consequence-based objectives require assessment on the basis of consumer welfare or consumer performance. The assessment of consequence-based objectives requires an evaluation of what the *client* knows, does, or is able to do. While it may be necessary for the counselor to know certain things and be able to do certain things, "knowing," "being able to do," or "performing" do not guarantee results or consequences. The counselor, in fact, may know everything there is to know about a particular act of counseling, be able to perform that act to perfection, and still may not be able to promote client welfare or bring about desired client change. As one can easily conclude, consequence-based objectives are the key to competency-based counselor education. If consequence-based objectives are not stated for

prospective counselors and if prospective counselors are not held accountable for their achievement, the core of competency-based learning is lost.

If professional counselors are to be held accountable for the effectiveness of their actions, they must also be able to demonstrate their competency in promoting client welfare. For this discussion, client welfare is defined as the amount of congruence between "What Is" and "What Ought To Be" for the client. (See Figure 2.)

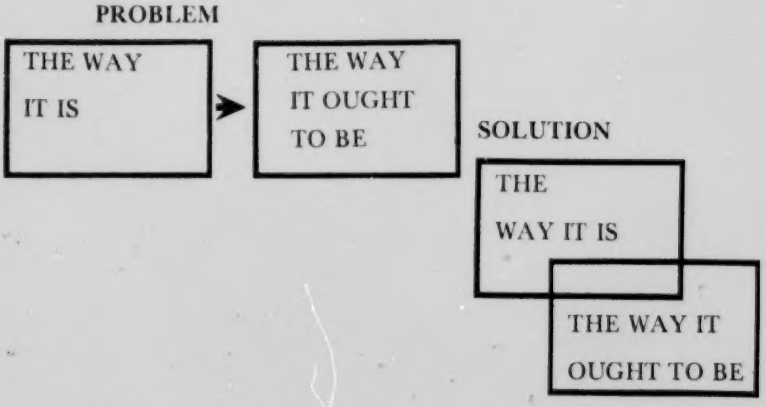

Figure 2. Problems and solutions viewed from a congruence-discrepancy model

By the same token, the discrepancy between the situation determines the degree of the client's problem or the strength of the goal. What is missing between the two situations is a middle, some change strategy for problem solving. (See Figure 3.)

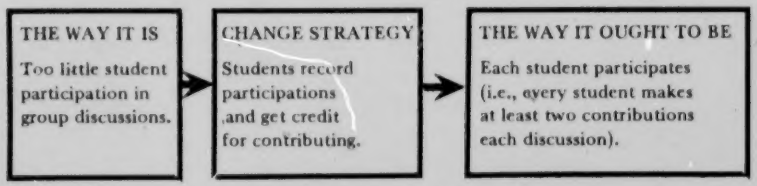
THE WAY IT IS
Too little student participation in group discussions.
CHANGE STRATEGY
Students record participations and get credit for contributing.
THE WAY IT OUGHT TO BE
Each student participates (i.e., every student makes at least two contributions each discussion).

Figure 3. Systematic intervention

Whether or not a problem has been solved or a goal achieved depends upon the efficacy of the solution or change strategy; that is, the effect of the change strategy is measured by finding the difference between the post-treatment condition (The It Ought To Be) and the pre-treatment condition (The Way It Is). This equation is expressed as post-treatment condition (P_OTC) minus pre-treatment condition (P_rTC) equals effectiveness of treatment (ET) (See Figure 3).

Operating under the competency-based learning model, competent counselors are defined as persons capable to reducing the difference between "What Is" and "What Ought To be." They have the ability to devise and implement strategies leading to the solution of problems and the realization of goals. A person is competent in a particular area to the extent that he/she is able to effect efficient solutions to problems in that area. Given these considerations, it follows quite naturally that consequence-based objectives are the very backbone of competency-based counselor education in that they require an observable change in both the client and the trainee.

Competency Assessment

No less crucial than the identification of counselor competencies is the construction and use of appropriate assessment procedures to determine whether or not a prospective counselor can perform counselor functions competently. In traditional counselor education programs, students are graduated and/or certified after completing a certain set of experiences or courses. In most such situations, grades are then used to denote the degree of successful achievement in units, courses, or semseters. Grades typically compare students with other students. Group norms are then used to determine a student's ability in relation to the average, that is, whether the student's performance is "below average," "above average," or "just average" for the group. Each of us has had, no doubt, some past experience with grading curves. For example, we might recall the high school teacher who would consistently curve the grades across a class section to ensure that a certain number of A's, B's, C's, D's, and F's are found at each grade level. On the other hand, we might also recall the teacher who had a

reputation for being an easy grader, or, at the other extreme, a difficult instructor. Regardless of the specific norm, whether the norm was set before or after the performance was assessed or regardless of the shape of the curve used, this approach to assessment, namely normative-referencing, compares students to find the "average" students and the "below" and "above" average students.

Norm-referenced tests are correctly used when the primary purpose of measurement is to establish the relative standing of the person tested. A common example of this method in practice is the regular and systematic administration of academic achievement tests. In many of these situations, the purpose is not to assess an individual student's attainment of specified curriculum objectives, but to permit reliable ordering of students in a class or school. The result is a distribution where a few students do very well, a few poorly, and a majority about average.

There are several objections to the use of normative-referenced assessment in competency-based counselor education programs. One difficulty is that competency-based programs interpret a student's performance in relation to predetermined criteria or performance standards. This procedure is called criterion-referenced assessment. Under criterion-referencing, one person's performance is not compared with another's. Consequently, no person is ever at the bottom or at the top of a distribution, because performance is not distributed over a range. The range is restricted to a "yes" or "no" evaluation of his accomplishments. Thus in competency-based programs it is useless to talk about a student being in the upper ten percent of all counselors-in-training. Either the student reached the predetermined criterion level or he did not.

Criterion-referenced tests are correctly used when the purpose is to "provide information as to the degree of competency obtained by a particular student which is independent of reference to the performance of others" (Glaser, 1963). Criterion-referencing permits the individual learner to determine where he is in relation to his goals without reference to where he stands in relation to other members of the group

with whom he is categorized. Under criterion testing, the resultant distribution is skewed positively, that is, most of the test scores cluster in the upper regions.

Criterion referencing and normative-referencing also differ in their assumptions about the entry behavior of individual learners, processes employed to promote learning and competency attainment, time allotted and scheduled for the learning process, and assessment of the product. Under normative referencing, learners are assumed to be quite similar in need, past history, achievement, and so forth. The initial input is assumed to be constant across learners. Secondly, because learners are assumed to be "quite similar," a "quite similar" learning process or program is prescribed for each learner. In other words, the learning process, the strategy for promoting learning, is the same for all learners. Lastly, not only is the same learning process prescribed for all learners, all counselor trainees are also required to enter and exit the learning process at the same time. Obviously, this means that each learner is expected to move as quickly or as slowly as his peers. Time of entry and time of completion are, therefore, also constant. And the product is variable as indicated by "A" to "F" letter grades.

The antithesis to this "straw man model" is criterion-referencing, where individual input, learning processes, time of entry and time of completion vary across individual situations. The only constant is the product, meaning that successful completion is indicative of a comparable minimum standard of performance for each learner whose accomplishment has been certified.

Implementation of Competency-Based Learning

The third developmental phase of a competency-based counselor education program should be characterized by efforts to identify, describe, and then provide "optimal patterns of resource support for the development and implementation of CBL" (Devault, Joyce, and Gollaway, 1973). According to Devault et al. (1973), three questions must be posed in considering strategies for the support of competency-based learning programs:

1) What resources are required?

2) Who can deliver these resources?

3) Where can delivery points be located?

While phases one and two are most properly governed by the criteria of relevance and worthwhileness, the criteria of effectiveness and efficiency are highlighted during this third developmental phase.

Unlike the traditional activity-oriented programs in which many present counselors and counselor educators received training, competency-based programs seek to maximize the effectiveness and the efficiency with which all students achieve specified objectives. Several significant procedural changes are demanded in order to realize these goals. Of particular significance is the emphasis which competency-based learning places upon intended outcomes as opposed to the typical emphasis upon procedures employed to promote those outcomes. All too often graduate education has focused upon what the instructor will do to students and the means he/she will use to accomplish whatever is to be done to them. Students and faculty, for example, often debate the merits and demerits of the lecture method or the small group discussion method. Competency-based learning takes the position that there is a place for every method and that the range of individual differences among learners determines how many different methods should be available to a group of learners. However, the question of method can legitimately be raised only after terminal objectives (i.e., outcomes) have been specified and learner characteristics (i.e., entry behavior) have been assessed.

Although emphasis in the competency-based learning model is upon intended consequences, it does recognize the learner's need to have access to the resources required to effect the desired consequence, in this case, to achieve mastery of the prescribed competencies. Under ideal conditions, students have access to the following kinds of resources or instructional alternatives: auto-instructional materials, other directed readings, videotape lectures, live demonstrations, formative feedback through conferences with their instructors, and problem-solving seminars.

One type of interface which might be scheduled at the request of the student is the problem-solving seminar. (We isolate it for description only because of its slightly different parameters.) The problem-solving seminar is not a structured presentation by an expert in a particular competency area. Rather, it is designed to provide an opportunity for students to discuss any problems that they may have encountered in working through instructional alternatives associated with a particular competency area. Such a seminar generally specifies a minimum number of students, usually from eight to ten. When the students are ready for a seminar, they may request one by filling out the appropriate resource request form and turning it in to some kind of operations center (equivalent to the CBL Resources Center in our program). When the pre-specified number of students have registered for the seminar, the date and time are posted; and again, it is the student's responsibility to check the CBL Resources Center bulletin board for seminar schedules and other information.

During the course of a term, any number of seminars can be scheduled, and times can be arranged to the mutual convenience of the input agent (faculty, community member, etc.) and the intended consumer (the student).

Obviously, the competency-based learning model does not permit the scheduling of these inputs at the beginning of the school term, and the possibility always exists that the input will not be selected as an instructional alternative. However, there will be times when the pursuit of a given competency area will suggest the advisability of arranging some sort of interface between an "expert" and a small group of learners, or a seminar for small group discussion around problems encountered in working through certain performance term objectives. In all such situations it is the responsibility of the student to request a specific kind of interface. All such experiences are initiated by individual students and arranged through an operations center.

Under the competency-based learning model, the instructor assumes the role of a resource manager. His charge is to direct individual students into effective and efficient learning alterna-

tives. To do so requires that a minimum of instructional alternatives exist, that the instructor be aware of those alternatives, and that individual students have access to those alternatives provided they meet the necessary prerequisites.

One of the major differences between competency-based learning and other instructional models is the temporal organization of instruction and the progress of students. Competency-based learning and evaluation require a "flexible" or "open time" organization. Students must be allowed to move on to subsequent competency areas at any time during the semester and the option of continuing beyond the scheduled final class meeting of the seminar. And, as Mueller (1973) points out,

> . . . a grade of "incomplete" must be allowed to become the rule rather than an exception, and evaluation must occur at different times for different students. In short, the mastery model can be utlized in a conventional, fixed-time instructional setting only to the extent that the conventional setting can be made unconventional by eliminating the fixed-time units.

The IU-IPS Satellite and the Indiana University Department of Counseling and Guidance plan permits the individual student to receive credit for specific competencies he has already achieved. Following such assessment, individual learning programs are developed to assist the student in the mastery of the remaining required core competencies and the specialization competencies contracted by the individual student. It follows that the completion time will vary among trainees. Theoretically, any student should be able to receive credit for all required competencies following preassessment. Others should be able to demonstrate their desired mastery level within several weeks. Yet others may elect to extend their certification into a subsequent semester time frame. In operation, the procedure should look something like the following flowchart model.

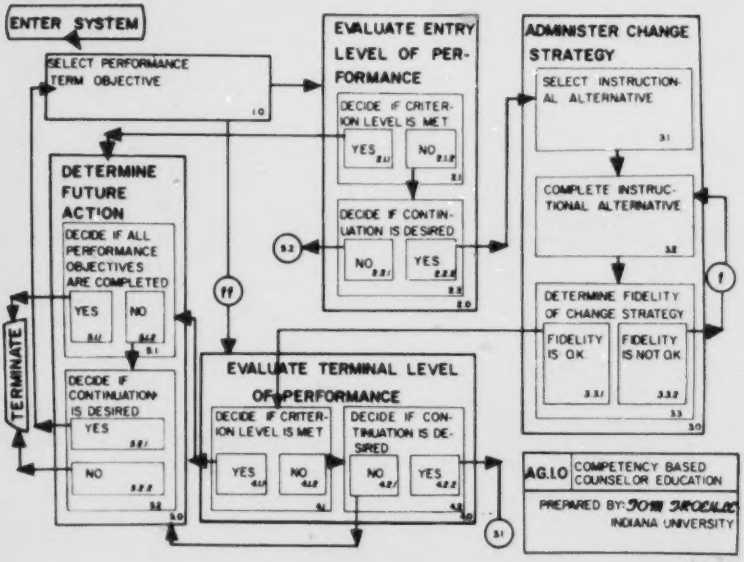

Figure 4. Flowchart Model Showing Relationships Among Performance Objectives, Performance Criteria and Alternative Instructional Strategies in CBL.

A Commentary

Although there are a variety of approaches available to counselor educators who wish to implement a Competency-Based Counselor Education program, the kind of training employed by the IU-IPS Satellite from 1971 to 1974 and informally adopted by the Indiana University Department of Counseling and Guidance is fundamentally an approach which promotes observable and effective change in both the system and the clientele.

However, this approach does not initially base its objectives on an analysis of the system; it is one which formulates the competencies to be acquired by the counselor trainee by delineating the needs of the clientele (all members of the Educational Community both at the university and at the field-based training sites), and then discovers how innovative responses to those needs effect the various levels of the system(s) in which the clientele operate. In other words, it is fundamentally an approach which moves outwardly, from the specific to the theoretical, from the client to the system, from assessed needs to competency areas. Consequently, the development of a program for counselors with an Inner City emphasis at IU was inextricably linked in the beginning to the needs of the target school, to the students involved in the program, and to the organizational structure of the Counseling and Guidance department at IU when the decision to introduce a CBL program was made. This link to such a specific group of people and institutions might suggest that the program at IU is too unique to have any generalizable implications for other counseling and guidance departments. However, such an evaluation would simply be missing the major strength of a Client Needs Assessment Approach to competency-based learning, that is: It is an approach which recognizes the uniqueness of a given situation and seeks to develop appropriate responses to it. The specific competencies may change, but the patterns of assessment, developing change strategies, measuring the effectiveness of the training, or the satisfaction of a need do not.

It is because of the close link of the program to its clientele that any relevancy can be achieved in educational programming. And, in addition, it is the preference for consequence-based objectives that promotes accountability for both the student and the client, thus multiplying the possibility of achieving desired program results.

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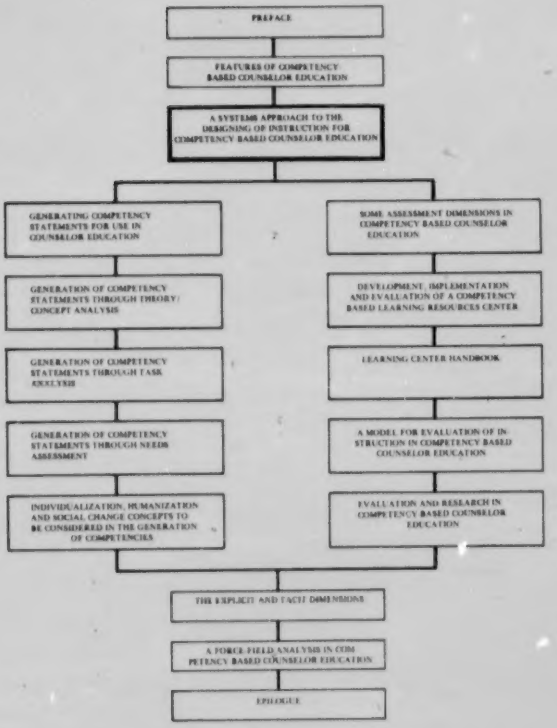
A Systems Approach to the Designing of Instruction for Competency-Based Counselor Education

J. Craig Brubaker


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE-FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

A Systems Approach to the Designing of Instruction for Competency-Based Counselor Education

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The purpose of this paper is threefold. First is to give a general introduction to the field of system theory. A definition of a system will be presented along with five (5) concepts central to the discipline. Secondly, the elements of Competency-Based Education (C.B.E.) will be identified. Through the use of a diagram, the essential elements, implied and desirable characteristics of C.B.E. will be illuminated. Thirdly, the design of an instructional system for implementing Competency-Based Counselor Education (C.B.C.E.) will be presented. The segments, characteristics, and relationships in the model will be described and discussed.

Before proceeding to the body of the article, a short explanation is needed for some of the notations that will be encountered throughout the piece. Periodically, the reader will come upon authors' names and page numbers in italics. These citations make reference to articles found within this volume. The author, whenever appropriate, has listed readings which are felt to expand upon the area being discussed. It is hoped that this addition will add to the clarity of the present piece as well as those which are to follow.

Unfortunately, the word "system" has many meanings which are of no use to our discussion here. In order to exclude these peripheral meanings and at the same time provide a starting point for this presentation, the following definition is given:

> A system is a set of objects together with relationships between the objects and between their attributes (Hall and Fagen, 1970).

To aid in the reduction of the vagueness of this definition, the terms object, relationship, and attribute can be elaborated upon.

Objects are simply parts or components of a system, whose variety are unlimited. Systems can be made up of physical parts,

such as: springs, wires, bones, chairs, or chalkboards, or they can be composed of abstract objects, such as: equations, rules, laws, or processes (as in the system to be described later). These objects may also be labeled subsystems.

Attributes are the properties of these objects. For example, the objects listed have the following attributes:

spring	-	tension, displacement
wire	-	diameter, length
bones	-	shape, weight
chair	-	height, composition
chalkboard	-	color, size

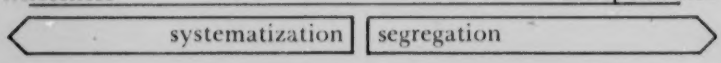
Relationships are what tie the system together. It is through these relationships that the total job of the system is completed. All of the separate objects and their attributes must be connected if their combined effects are to produce the output of the system.

With this definition in mind, let us look at four (4) processes which occur in most systems during their lifetime (Hall and Fagen, 1970).

Systems vacillate on a continuum between *wholeness* and *independence*. In our definition of system, we noted that all systems have relationships between objects and between their attributes. If every part of the system is so related to every other part that a change in a particular part causes a change in all the other parts and in the total system, the system is said to behave as a whole. At the other extreme is a set of parts that are completely unrelated; that is, a change in each part depends only on that part alone. This type of system is characterized as independent. It is between these two poles that a system moves during its lifetime.

The next two processes relate to the direction in which the system is moving on the continuum.

Figure 1



As a system changes, which it must do to continue to exist, and moves in the direction of independence, it is in a process of *segregation*. This segregation process could be due to decay. When a puzzle is continually played with, the picture wears off, some pieces are lost, and others are mangled. Finally it is impossible to put the puzzle together.

Segregation could also be a part of the growth of a system. With an increase in the demand on the system, it might be necessary for it to split up its objects into subsystems which will develop into autonomous systems with their own separate functions.

If, as a system changes, it moves toward wholeness, it is then in a process of *systematization*. Systematization is characterized by a strengthening of pre-existing relations among parts, the development of relations among parts previously unrelated, the gradual addition of parts and relationships to a system, or some combination of these changes.

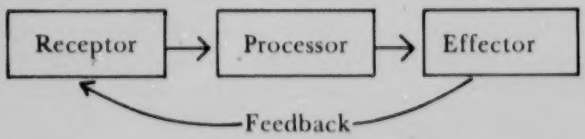
In most systems, the movement on this continuum between wholeness and independence is not pure. Certain parts of the system are systematizing while other parts are segregating. This is necessary because the demands on the system are not pure. Some parts of a system are pressured to break apart in order to meet the needs of the environment in which they exist, while other parts of the system are pushed closer together and forced to form tighter relationships in order to survive.

Centralization is the fourth process found in most systems. A centralized system is one in which one object or subsystem plays a major or dominant role in the operation of the system. The workings of the system are centered around this subsystem. A small change in this central part will be reflected throughout the system. Small changes in a man who happens to be the president of a corporation can make major changes in every employee's life. Centralization can be going on during the systematization or the segregation process.

The major value of the systems approach for counselor education is its cybernetic quality; its ability to adjust, based on feedback. The preceding pages have defined system as a fluid concept, one which will change in various ways according to

the demands placed upon it. It is this type of counselor education program which is needed to fit the dynamic world in which we live.

A general conceptualization of such a system is made up of three parts: receptor, processor, effector (Von Bertalanffy, 1956).



The receptor is responsible for gathering all information necessary to carry out the process. The processor is responsible for taking that information and organizing it in such a manner as to provide a service. The effector takes the outcome of that service, evaluates it, and transmits the outcome back to earlier subsystems. It is this model of a system which we will use to develop a competency-based counselor education system.

Before we go on to discuss a system for implementing a competency-based counselor education program, we first need to look at the assumptions which are the basis for C.B.E. Out of these will come the objects, functions and relationships necessary for the system to operate. Figure 2 was developed from the characteristics described by Elam (Performance-Based Teacher Education. What is the State of the Art? Washington, D.C.: American Association of Colleges for Teacher Education, 1971).

Figure 2

COMPETENCY-BASED EDUCATION

Implied Characteristics	Essential Elements	Desirable Characteristics
1. Instruction is individualized, personalized and modularized.	1. Competencies (knowledge, skills, behavior to be demonstrated by the student) are derived from explicit conceptions of teacher roles, stated so as to make possible assessment of a student's behavior in relation to specific competencies, and made public in advance.	1. The program is field-centered.

2. The learning experience of the individual is guided by feedback.	2. Criteria to be employed in assessing competencies are based upon, and in harmony with, specified competencies; explicit in stating expected levels of mastery under specified conditions; and made public in advance.	2. There is a broad base for decision making (including such groups as college/university faculty, students, and public school personnel).
3. The program as a whole is systematic.	3. Assessment of the student's competency uses his performance as the primary source of evidence; takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behaviors; and strives for objectivity.	3. The protocol and training materials provided to student focus upon concepts, skills, knowledges, (usually in units called modules) which can be learned in a specific instructional setting.
4. The emphasis is on exit, not on entrance requirements.	4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion.	4. Both the teachers and the students are designers of the instructional setting.
5. The student is held accountable for performance, completing the program when, and only when, he demonstrates the competencies that have been identified as requisites for a particular professional role.	5. The instructional program is intended to facilitate the development and evaluation of the student's achievement or competencies specified.	5. Preparation for a professional role is viewed throughout the career of the professional.

Out of these assumptions about C.B.E. come the objectives for the instructional system, the main objectives being the essential elements Dr. Elam identified. These system objectives are assigned to the three objects of our cybernetic system.

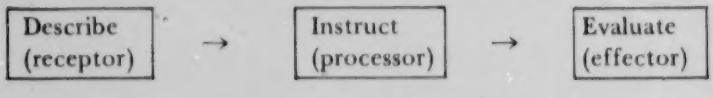
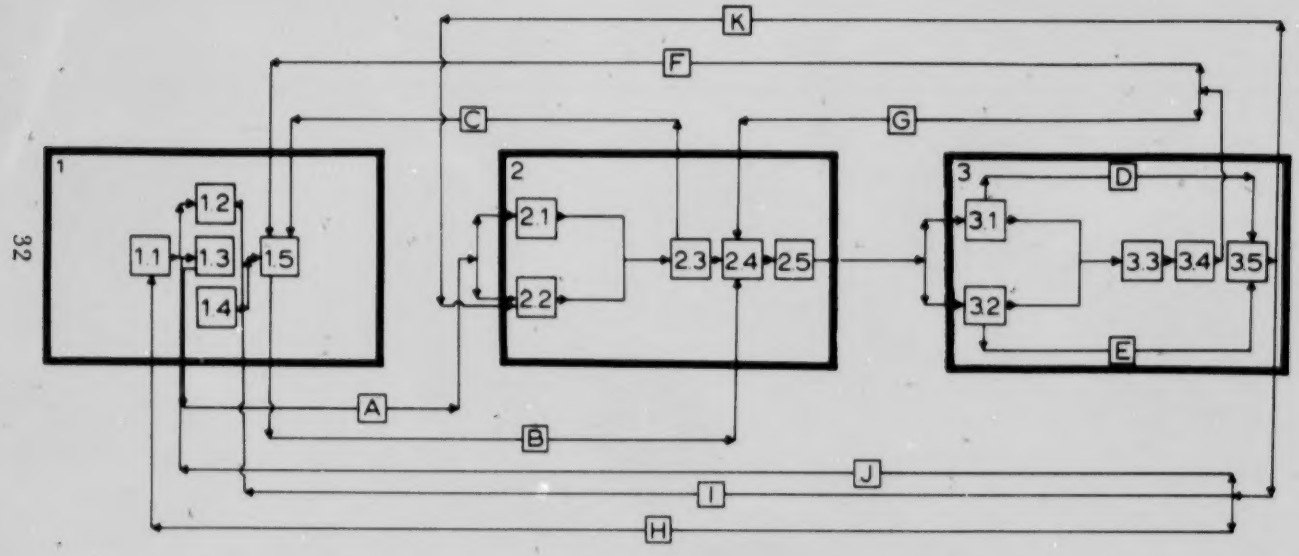


Figure 3

As the system objectives are broken down and distributed to these three objects, the attributes, which for our purposes might best be termed functions, and relationships of the instructional system are determined.

The following is a flow chart and a description of the objects, functions, and relationships which make up this C.B.C.C. system.

FIGURE 3



OBJECTS

1 DESCRIBE

2 INSTRUCT

3 EVALUATE

FUNCTIONS

DESCRIBE

1.1 Description of consultant role
1.2 Description of behaviors necessary to perform role
1.3 Description of level of mastery of behaviors
1.4 Description of student entry level performance
1.5 Description of individualized curriculum

INSTRUCT

2.1 Development of assessment instruments
2.2 Development of protocols and training materials
2.3 Development of modules
2.4 Presentation of modules
2.5 Presentation of assessment instruments

EVALUATE

3.1 Collection of information on student progress
3.2 Collection of information on module effectiveness
3.3 Decision on student progress
3.4 Feedback of decision information
3.5 Research on instructional content and process

RELATIONSHIPS

A	Role information transfer
B	Student profile information transfer
C	Module description information transfer
D	Student assessment information transfer
E	Instructional effectiveness information transfer
F,G	Student progress information transfer
H,I,J	Role research information transfer
K	Instructional research information transfer

Definition of Functions

1.0 DESCRIBE

1.1 Description of counselor role

The role of the counselor is a description of the general characteristics of the job (Jackson, p. 85 ff).

Job Setting	Services Offered	People Serviced
Manpower	Vocational Counseling Personal Growth Counseling	low income men and women
High School	Personal Growth Counseling	16-18-year old boys and girls
Prison	Behavior Management Paradigms	21-45 year old men

1.2 Description of behaviors necessary to perform role

There are many methods for determining the appropriate counselor behaviors. Three major procedures have been described many places in the literature:

Concept Analysis	(Baker, p. 55 ff.)
Task Analysis	(Davies, p. 65 ff.)
Need Assessment	(DiSilvestro, p. 75 ff.)

By concept analysis is meant the process of looking at the major theories of counseling and out of them developing the behaviors needed by a counselor. In a task analysis, an effective counselor would be designated, and by watching and recording the behaviors he or she performs, a list of appropriate counselor behaviors would be generated. In conducting a needs assessment, the recipients of the counseling service would be examined. The needs of the recipients would be determined, and counselor behaviors which would meet these needs would be identified. All of these procedures are currently in use in the field. The most prevalent procedure is to combine these processes in order to obtain a more overall view of the role of a counselor. (Froehle, p. 41 ff.)

1.3 Description of the level of mastery of behaviors

The description of the level of mastery is the process of determining how well the behaviors should be performed.

This is one of the major weak areas in C.B.E. Little or no research has been done to determine how well any behavior should be performed. In most cases this decision is made arbitrarily by the instructor. (Larrabee, p. 195 ff.).

1.4 Description of student entry level performance

After the appropriate counselor behaviors have been identified and the level of proficiency for each behavior has been set, the incoming student must be assessed according to these standards. This will give the system information concerning the instructional needs of each of the entering students.

1.5 Description of the individualized curriculum

Upon obtaining the information concerning the instructional needs of the students, the system must then design an individualized learning package for each learner. In order to perform this function, this subsystem needs information concerning the instructional capabilities of the entire system. If this information is not available at this early stage, adequate instructional design cannot be accomplished. (Davies, p. 217 ff.)

2.0 INSTRUCT

2.1 Development of assessment instruments

Information concerning target behaviors and the proficiency level needed in these behaviors is used to produce criterion-referenced measurements of student performance. (Froehle, p. 103 ff.)

2.2 Development of protocols and training materials

This is the process of producing protocols, which will help the student recognize and understand a counseling concept, i.e. reinforcement; and training materials which will enable the novice counselor to reproduce or put into practice a sequence of activities or procedures required by a counseling concept, i.e. behavior change program. (Brubaker and Childs, p. 135 ff.).

2.3 Development of modules

After the protocols and training materials are developed, they are combined with the assessment instruments to form sequentially designed units or modules. (Brubaker, Childs, p. 135 ff.).

2.4 Presentation of modules

There are three possible formats for presentation of the modules: large group presentation, small group discussion, or individualized instruction. When the format has been chosen, the resources needed for its implementation are developed, and the module is presented. (Froehle, Brubaker, Ingram, p. 119 ff.).

2.5 Presentation of assessment instruments

Upon completion of the module, the learner is conducted through an evaluative exercise which will present information concerning 1) a student's proficiency in the target behavior, and 2) the module's effectiveness in training the student.

3.0 EVALUATE

3.1 Collection of information on student progress

A score is obtained from the learner's behavior on the assessment instrument. This information is then recorded in a predetermined format so that it is ready to transmit to other parts of the system.

3.2 Collection of information on module effectiveness

Information is collected concerning the amount of time it took to complete the module, the format of the module presentation, the number of times the learner has gone through the module, and other data relevant to the specific situation. This information is recorded in a predetermined format and readied for transmission to other parts of the system.

3.3 Decision on student progress

In this function the decision-making body, whose make-up is determined by each specific counselor education

system (i.e., students, faculty, practicing counselors), is given the information concerning the learner's performance and the effectiveness of the training module. With this information it describes the next steps the learner must take to move through the instructional system.

3.4 Feedback of decision information

The form of this feedback function varies depending upon the type of information to be transmitted and the recipient of the information. If the feedback is positive in nature and concerns a student's progress to the next module, it might best be transmitted by a note. If the feedback is negative and concerns remedial action, it might best be carried by an adviser who can explain the learner's past performance and objectives for future performance.

3.5 Research on instructional content and process

Research on the *content* of the instruction focuses upon the specific behaviors which are being taught in order to better determine if they are appropriate components of the counselor role and, if so, what mastery level a student must have to perform this role. The research on the *process* of instruction evaluates the effectiveness of the modules and develops information necessary for their redesign. (Ragatz, p. 179 ff.) (Larrabee, p. 195 ff.).

RELATIONSHIPS

The relationships, as has been stated before, are what hold the system together. It is through them that the objectives of the system are accomplished. This system has eleven major information transfers, A through K.

A When information concerning the level of mastery for the target behaviors in the instructional system have been determined [1.3], it is transmitted to [2.1] and [2.2] where it can be used to develop the materials necessary for instruction and the assessment instruments appropriate for evaluating student performance.

B — When a student's individualized learning package has been designed [1.5], this information is given to function [2.4] so that the appropriate modules can be presented.

C — Upon completion of the designing of the modules [2.3], information concerning their objectives and content is transmitted to [1.5] so that those responsible for designing student curriculum have a complete idea of the instructional capabilities of the system.

D — Information gathered concerning student performance on specific behaviors [3.1] is recorded, many times in a computerized form, and given to [3.5] where research information on the appropriateness of the behavior in the counselor role can be compiled and a more accurate performance level for each behavior can be determined.

E — Information on the instructional effectiveness of each module [3.2] is sent to [3.5] so that decisions can be made concerning possible redesigning of the module.

F and G — Appropriate feedback procedures for information concerning student progress are determined [3.4]. The content and procedure for communicating this information is then transmitted to [1.5] (relationship F) so that a complete record of the student's progress through the instructional system can be accumulated.

If the feedback procedure is a direct communication to the student, the information is given to [2.4] (relationship G) for deposit in the student's box.

H, I, and J — Research information concerning the content of the instruction [3.5] is transmitted to: [1.1] (relationship H) so a more appropriate counselor role can be described; [1.2] (relationship I) so a more discrete and measurable definition of the component behaviors can be developed; [1.3] (relationship J) so the criterion level for each behavior can be revised to better reflect the needs of the counselor.

K Research information concerning the effectiveness of the modules [3.5] is transmitted to [2.2] so that the protocols and training materials can be redesigned to better present the instructional content.

Comment on the System in General

If you look for C.B.C.E.'s place on the continuum between wholeness and independence, the system must initially be found in the process of systematization or moving towards wholeness. (Refer back to Figure 1.)

If a C.B.C.E. system cannot accurately and completely communicate between all of its subsystems, the main objectives of the system will never be accomplished. As the system ages, the demands for increased performance on each of its subsystems will grow, and this will necessitate that each subsystem increase its focus upon its own functions (segregation) in order to obtain its objectives. This at no time will mean that the extensive process of information exchange among subsystems can be diminished.

As the demands on the subsystems increase, centralization will occur; certain functions will assume central importance in the operation of the system. Functions [1.5] (Description of individualized curriculum), [2.4] (Presentation of modules), and [3.5] (Research on instructional content and process) have become the central focus for many C.B.E. programs. (Brubaker, p. 233 ff.).

It is the function of [1.5] to design the initial student curriculums and to continue to redesign them as the students move through the instructional systems. This requires a great deal of interaction time between students and advisers and must be done adequately if student dissatisfaction is to be kept at a minimum. Function [1.5] is also responsible for the housing of and giving ready access to information concerning student progress. As the age of the system increases, this job becomes increasingly important.

Function [2.4] is where the efforts of the other functions are focused. If the instructional material is not presented appropriately, the work of the other functions has been diminished. It is here also that a major portion of the instructional budget is spent. In this function is housed the myriad of instructional devices designed to implement the instructional modules. Because of this monetary commitment and the present emphasis on instructional technology, [2.4] will become a central function in the system. (Froehle, Brubaker, Ingram, p. 119 ff.).

Function [3.5] is now emerging in the C.B.E. movement as the area of major focus. Much lip service and some research money is being given to designating the core behaviors necessary to perform the counselor role. There is also increased awareness of the fact that there is no hard evidence concerning the competency levels needed to perform these target behaviors. If C.B.E. is to gain full creditability in the profession, this area must become more central; explicit statement of behaviors that have not been shown to be essential in performing the role of a counselor are of little use to the counselor education profession. (Larrabee, p. 195 ff.).

The preceding paper has been an attempt to relate the principles and tools of systems theory to the design of a C.B.C.E. instructional system. It has been my purpose to present one possible instructional model for implementing C.B.E. in counselor education. An exact description of any of the subsystems has not been presented, for this type of detail can only be generated by the implementation of this general instructional system to a specific situation. It is hoped that the paper presents a cogent picture of a C.B.C.E. system. The evaluation of this system is left up to the reader as he compares the educational needs of his particular setting with the instructional characteristics of C.B.C.E.

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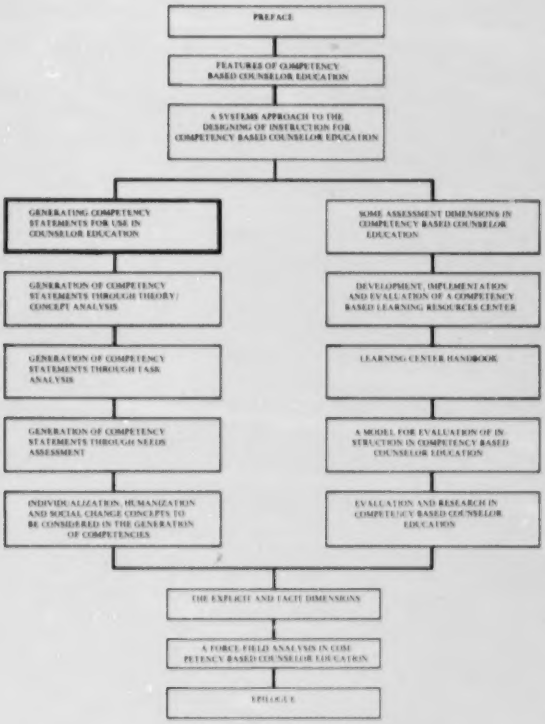
Generating Competency Statements for Use in Counselor Education

Thomas C. Froehle


PREFACE
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INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF IN STRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Generating Competency Statements for Use in Counselor Education*

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This paper represents an attempt to describe some of the more common approaches used in identifying, organizing, and classifying the competencies which counselor education programs seek to develop in counselors-in-training. While we do point out sources of merit, we make no claim to a systematic consideration of merit or to a responsible evaluation of the approaches to the various tasks. For such discussion, the reader is referred to a related paper authored by Jackson (1974). Nor does this paper attempt to describe or evaluate various delivery systems for making competency-based learning available to counselors-in-training. For a preliminary consideration of these distinguishing characteristics, you are referred to a paper titled "Features of Competency-Based Counselor Education" (Froehle, 1974).

Some Definitions

Because there is no agreement on a definition of competency-based learning and/or competency-based education, it is first necessary that we share with you key definitions specific to this paper. As a starter, we would like to define competence as "an organism's capacity to interact effectively with its environment." In the counselor-client environment there appears to be considerable agreement that this capacity is functionally related to the knowledge and to the behavioral and judgment skills brought to that relationship (the order, however, should not suggest relative importance). For our purpose, then, a competency may be defined as "knowledge, skill, or judgment which the student will demonstrate at a predetermined proficiency level before initial and/or continuing certification " (Cook, Newhauser, and Richey, 1972).

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Elsewhere in the literature, a competency has been operationally defined as a general statement covering a complex performance (Cottrell, 1970; Dodl, 1973; Houston, 1971). Attention should be directed to the description "general statement." Increasingly, competency statements are behavioral in nature but with no stated criteria. Detailed criteria are more typically included in the terminal performance objectives which give operational meaning to the competency statement. That is to say, terminal performance objectives make up a competency and their achievement is used as evidence of competence.

This brings us to the definition of competency-based counselor education (CBCE) which we would like to define in terms of its programatic features. Simply stated, a competency-based counselor education program is one in which the competencies to be acquired by a prospective counselor and the criteria to be applied in assessing those competencies are made explicit prior to instruction and training. Once specified, the competencies identify what a prospective counselor will know, what he/she will be like, what he/she will be able to do, and how the prospective counselor should be able to function in the real world of counseling. In such a program both the training program and the counselor-in-training are evaluated in terms of the trainee's ability to demonstrate mastery of the prespecified competencies (Okey and Brown, 1973). CBCE programs differ principally from the more traditional programs in that CBCE programs focus more upon the competencies required for successful performance than upon the procedures used to develop those competencies.

Some Assumptions

Competency-based counselor education (CBCE) is predicated on the assumption that there exists some knowledge and a range of behavioral and judgment skills which, upon possession by the practitioner, increase the likelihood of counselor effectiveness. In effect, CBCE assumes that prospective counselors who possess such skills will be successful

in more client relationships than prospective counselors who do not have the skills--success being defined in terms of increments in client welfare.

Another assumption fundamental to CBCE is that this knowledge and these behavioral and judgment skills can be identified and promoted through the systematic arrangement of opportunities for learning and practice. Said another way, it assumes that the competencies are not that illusive that their acquisition, use and effect preclude systematic description, measurement and investigation.

Identifying Counselor Competencies

It is generally recognized that the identification and explication of competency statements is properly the first and most fundamental task to CBCE.* Okey and Brown (1973) describe four procedures for identifying competencies for teachers. They are:

1. By *polling* interested parties: teachers, principals, supervisors, or teacher educators can be asked what skills they think teachers ought to learn.
2. By *poaching* from prepared lists: various institutions . . . and individuals . . . have listed teaching skills that can serve as sources for objectives.
3. By *observing* how experienced teachers act: observations can be made of master teachers at work in an effort to identify the teaching skills they use.
4. By *analyzing* the teaching act: Stolurow (1965) and others have suggested that teaching skills can be identified by analyzing the psychological requirements for learning to take place.

*This appears to be one of three efforts given special emphasis in CBCE. The two efforts which follow are: to develop procedures for assessing individuals and awarding credentials for mastery of these competencies; and to design and develop educational experiences directly related to the attainment of these competencies. (HEW, 1973).

The methods described by Okey and Brown may be differentiated from each other on the basis of the type of activity in which the "identifier" engages.

In reality, according to the authors, most identification efforts use a combination of the four methods with an emphasis upon one or two methods. The authors happen to prefer the "analyzing" method. Some interesting speculations emerge as one poses the question: What is it that ultimately governs the selection of the method of choice? Could it be that the choice of method most accurately reflects the chooser's attribution of legitimacy to the source of and to the manner whereby the competency was identified? Under method one, for example, a teacher, a counselor, a principal, a counselor educator or whatever is presumed to be an expert source of opinion. In contrast, method three relies on expert, but nonparticipant observers, possibly because more value is placed upon observed performance than upon self-reported performance. But these and other speculations go much beyond the scope of this paper.

One of the better known descriptions of approaches to competency identification has been presented by Houston et al (1971). He identifies six (6) approaches to competency generation: 1) program translation, 2) task analysis, 3) needs assessment, 4) cluster approach, 5) theoretical position, and 6) child-centered. In the next section of this paper we attempt a different ordering of the approaches and some slight modification in their respective definitions. And finally, we point to some possible programatic advantages and disadvantages of each approach. These are summarized in Figure 1.

The *Program Transformation Approach* (program translation for Houston *et al.*) simply involves the reformulation of currently available courses. Reformulation necessitates the rewriting of learning objectives and the modification of time parameters, modes of instruction, evaluation practices, and so forth. Expediency is the principal advantage of program transformation; however, it precludes the total reconstitution of the entire program.

APPROACH	ADVANTAGES	DISADVANTAGES
PROGRAM TRANSFORMATION APPROACH	Expediency Ease of accomplishment Doesn't take as much time Not as threatening to counselor educators	Precludes total program reconstitution
COMPETENCY CLUSTER APPROACH	Not as mind-boggling as dealing with the total process - "counseling;" yet not as limiting as the *Program Transformation Approach*	Two problematic assumptions: 1. the assumption that the clusters selected are in fact adequate building blocks for an entire curriculum 2. the assumption that the deductively derived behavioral objectives are equally important for the prospective counselor Precludes somewhat total program reconstitution
THEORETICAL APPROACH	Ensures continuity over time in a training program; permits accurate definition	Training procedures governed not by client outcome but by beliefs associated with a process
TASK ANALYSIS APPROACH	Permits precise description of professional performance and precise statements of training objectives	Excessive reliance upon current practice as the guide for training in the midst of uncertainty about the appropriateness of current practices
SYSTEM NEEDS ASSESSMENT APPROACH	Likely to win support of the system since it tends to perpetuate the status quo	High risk of oppressing individuals in the interest of system welfare
INDIVIDUAL NEEDS ASSESSMENT APPROACH	Potentially the most responsive to the needs of prospective clients	High risk that assessment data may dictate training in non-counseling kinds of performance and may create problems for counseling as a "profession"

Figure 1. Advantages and Disadvantages of the Six Approaches

The *Competency Cluster Approach* identifies several curriculum areas which serve as the building blocks for counselor training. Competency clusters are then broken down into competencies, then into competency components, and finally into behavioral objectives. The major advantage of the competency cluster approach is that it eliminates the mind-boggling problem of always having to deal with the total process; on the other hand, it is not as limiting as the program transformation approach. It allows educators to develop new curriculum areas and training methods, while simultaneously improving the old. The major disadvantages of this approach center on two problematic assumptions: first, that the clusters selected are, in fact, adequate building blocks for an entire curriculum; and, secondly, that the deductively derived behavioral objectives are as important to the prospective counselor as they are to the training program itself. Also, this approach precludes, to some extent, the reconstitution of the entire program in that the formulation of curriculum areas is made without any specific data regarding whether those areas are relevant to the actual needs of Pupil Personnel Service workers or their clientele.

The *Theoretical Approach* assumes the adoption of a certain theoretical position and a deductive analysis of what are considered those competencies needed for an "effective counselor" (e.g., Curkhuff and the "core dimensions"). The principal advantages of this approach are that it permits a training institution to describe accurately its future goals and that it ensures continuity throughout the duration of the training program. Disadvantages are simply that the training procedures of this approach are governed by beliefs associated with a process, not by the effects those procedures have on the clients' behaviors or desires. It is "means oriented" rather than "outcome oriented."

The *Task Analysis Approach* is based on observing competent counselors, engaged in the act of counseling in various work settings. The counselors themselves may be required to maintain a daily log or running diary and reconstruct their daily activities from it. The documents are then used to identify the major competencies that counselors feel are necessary for and/or

contribute to the performance of their work. The Task Analysis Approach permits the detailed description and definition of counselor functions and, thereby, makes possible the precise delineation of training objectives and goals. Its major disadvantage is its excessive reliance on the current practices of the established counselor as the guide for training competencies that are currently being challenged as appropriate for today's clients.

The *System Needs Assessment Approach* (needs assessment for Houston, *et al*) evaluates the needs of a society (especially, techno-future needs) or the needs of a particular school, community, or population subculture. Based on the collected data, training objectives are compiled deductively. Products of the System Needs Assessment Approach are most likely to win the support of the system since they maintain the *status quo.* Its major disadvantage is its high risk of oppressing individuals in the interest of system welfare. Almost insignificant by comparison is the problem of the lag between defining societal needs and the placement of counselors programmed to meet those needs.

Finally, the *Individual Client Needs Assessment Approach* (child-centered assessment for Houston, *et al*) is formulated by observing prospective clients to determine their goals, their resources, their problems, and their solutions. This approach seeks a direct relationship between client outcomes (their welfare), counselor performance, and training requirements. Since it is an approach that is potentially the most responsive to the needs of prospective clients and accentuates the possibility of devising needed programs and competencies, it had the advantages that the IU-IPS Satellite thought were most beneficial to realizing its own goals and would best suit the development of a training program in Inner City Counselor Education, especially since the unique needs of the Inner City clientele were not being satisfied by traditional counseling skills. The principal disadvantage of this approach is that the assessment of individual client needs may dictate training in non-counseling kinds of performances. Training in other fields may create problems for the "profession" of counseling, and

there still is no guarantee that the training will be relevant considering the time lag between assessment and completion of training.

Organizing and Classifying Competencies

Earlier we suggested a three-way classification for counselor competence: knowledge, behavioral skill, and judgment skill. The inclusion of these three components reflects the growing belief that instruction and training must be directed not only to the accumulation of knowledge but also to its application and to the systematic investigation of the consequences of that application. Brief definitions of each competency type are presented below and a summary of the focus for evaluation of each competency type is presented in Figure 2.

Competency	Focus for Evaluation
Knowledge Competencies	It's what the counselor knows and/or the amount of information or data which he possesses that counts.
Behavioral Skill Competencies	It's how the counselor performs that counts. It's what the counselor does with what he knows that counts.
Judgment Competencies	It's client welfare that counts. It's what the client knows, how he feels, or what he can do as a result of the counselor's efforts that counts.

Figure 2. Focus for evaluation of counselor competence.

Knowledge Competencies specify the knowledge, intellectual abilities, and information or data which the counselor is expected to demonstrate or somehow show evidence of having acquired. Knowledge competencies focus on what the counselor knows about counseling, not how well he can perform the acts that go into that counseling, nor how successful he is in effecting desired client change through the use of these counseling procedures.

Behavioral Skill Competencies focus on the counselor's ability to draw upon information, data, knowledge, and understanding in order to demonstrate or use a wide variety of prescribed counselor behaviors under specified conditions, either real or simulated conditions (e.g., "to use open-end leads in a ten-minute microcounseling situation"; "to interpret accurately to a parent in a parent conference a student's score profile on an academic achievement test"; "to reward clients according to pre-specified contingencies"). In all three situations, it's the "live performance" that we're interested in. The actual question is: "Can the counselor use open-end leads to the satisfaction of some pre-specified criteria?" "Was the verbal interpretation of the test score profile an accurate one?" "Can the person administer and withhold rewards according to some pre-specified contingency (e.g., ten minutes of Monday night football on TV for every ten minutes of practice on the saxophone)?" In none of the above examples are we questioning the effect of the counselor's performance upon someone else. This is not the focus for behavioral skill competencies. Rather, behavior skill competencies require assessment on the basis of the live performance of the counselor independent of any consideration of the effect of that performance upon someone (e.g., a client, a student).

Judgment Competencies focus on the ability of a counselor to bring about change in others. Assessment, therefore, focuses not upon what the counselor knows or can do, but upon the results of his knowing and doing, results which are demonstrated through change in someone else. Just as the acquisition of knowledge does not insure competence in the associated behavioral skills, neither does proficiency in the skill guarantee that the counselor trainee will correctly decide when to use which skills to meet the objectives of counseling and the needs of clients. Judicious decisions are critical to the success of a counselor—decisions about the most appropriate method of achieving the counseling goal, when the particular method should be used, and what should precede and what should follow it (Paul, 1967). Such decisions confront the professional counselor every day, and an effective counselor training pro-

gram must help the prospective counselor become an effective decision maker.

In this short paper we have described briefly the more frequently used approaches to the development of statements of counselor competency. Our experience at Indiana University has convinced us that there is no easy way—no short cut to this all-important function. Nor can one move on and bypass this stage even briefly because it is the foundation which ultimately governs the phases which follow, namely: 1) developing procedures for assessing individuals and awarding credentials for mastery of these competencies, and 2) designing and developing educational experiences directly related to the attainment of these competencies (HEW, 1973). To deviate from this sequence is to violate one of the most basic canons of competency-based learning. Only by steadfast adherence to the three-part sequence suggested in this paper can we hope to promote those outcomes. This notion is fixed to the very core of competency-based counselor education and the ultimate worth of this paper will be guaged by its success in promoting that notion.

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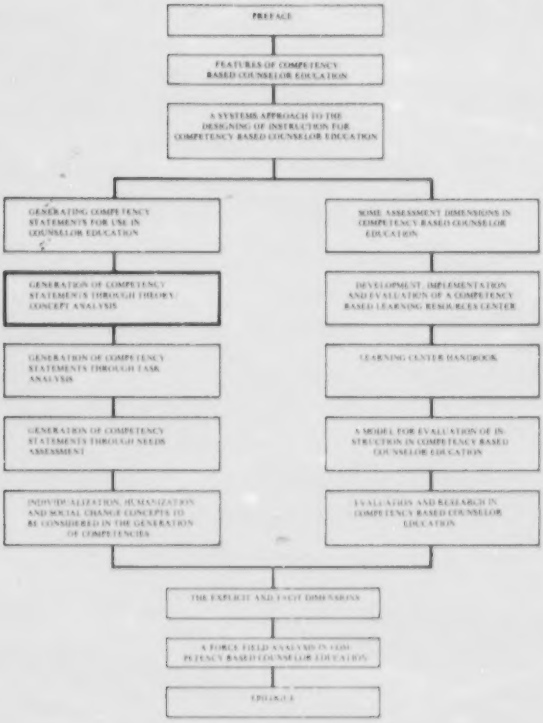
Generation of Competency Statements through Theory/Concept Analysis

Ronald D. Baker


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
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SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND IMPLICIT DIMENSIONS
A FORCE FIELD ANALYSIS OF COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Generation of Competency Statements through Theory/Concept Analysis*

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Competencies are skills or means necessary to accomplish some determined task. In that definition is a connotation of purposefulness and outcome. Counselor education currently employs varieties of approaches to the determination of competency. The most dominant one, however, is the theory-generated or conceptually based approach. I use the term theory in a very broad sense, because within counseling the designation of theory fails to describe adequately the total concept from a philosophy of science or a physical science tradition.

What skills must a counselor have in order to be effective at his job? Other papers in these proceedings address that question by analyzing the job or the task to be performed, breaking it into its components. This is a task analysis approach. In other instances competencies or necessary skills to accomplish a given task may be determined by a needs assessment. I will consider competencies to be determined by the broad assumptions of a theoretical or philosophical position, which yield certain requirements for the counselor in his abilities to effect that particular viewpoint. In order to recognize the source of competencies which come from theoretical bases, we must apply deductive thinking, beginning with assumptions about human nature. In counseling there exist models or conceptualizations of human functioning based on philosophies such as realism, idealism, existentialism, and phenomenology. For example, we recognize within the Rogerian system of counseling a very strong phenomenological view. Within Freudian approaches to counseling we see strong classical philosophical views.

At the initial step in determining competencies we must consider varieties of basic philosophical questions: What are the essences of man? Is man good? Is he rational? Has he inclinations to act in his best interest? What bounds man's perceptual and sensory worlds? We must consider these values and beliefs about

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people in order to develop statements of desired counselor competencies. From the concepts of human nature we are concerned, quite specifically, in education and counseling, with causes and maintaining factors for human behavior. What causes a person to act the way he does and once he acts, what keeps him acting in that manner?

Figure One illustrates the deductive sequence for the identification of counselor competencies generated from a theoretical position.

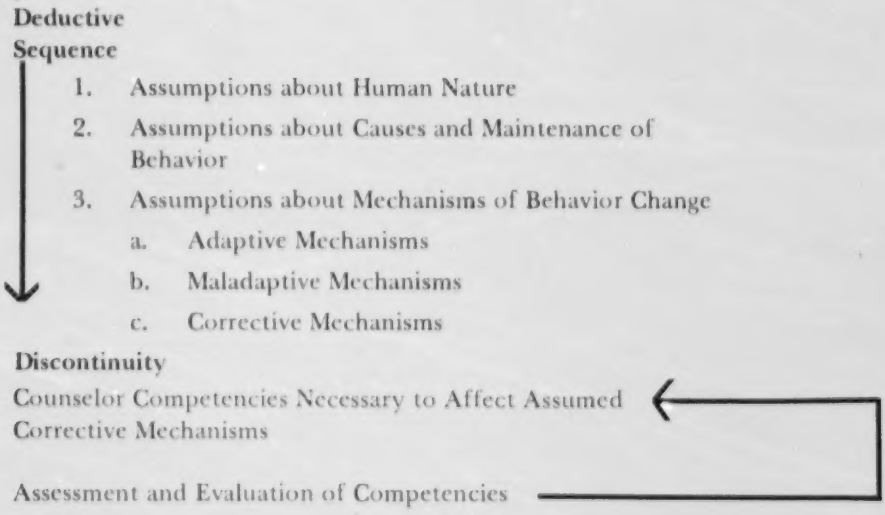

Deductive
Sequence
1. Assumptions about Human Nature
2. Assumptions about Causes and Maintenance of Behavior
3. Assumptions about Mechanisms of Behavior Change
a. Adaptive Mechanisms
b. Maladaptive Mechanisms
c. Corrective Mechanisms
Discontinuity
Counselor Competencies Necessary to Affect Assumed Corrective Mechanisms
Assessment and Evaluation of Competencies

Figure 1. Deductive Sequence, Discontinuity and Evaluation in Theory-Generated Competencies

Beliefs about human nature and the essence of man, that is, what makes him act the way he acts, eventually must be reduced to observed or supposed mechanisms. Counselors are concerned with the causes and the maintenance of human performance. Their work centers ultimately upon the affecting of mechanisms for change: supporting adaptive mechanisms and reducing maladaptive processes or mechanisms. Every viewpoint available to counselors contains some processes, mechanisms, or psychic strategies, which protect the individual, the integrity of the personality or the social appearance. Some of these mechanisms can readily be affected by the counselor; however,

some are inaccessible not only to the counselor, but to the individual himself. Sometimes the mechanism is a non-conscious one. In a Freudian system for example, there are mechanisms of balance and counteracting forces which strongly resemble Newtonian concepts of physics and concepts of thermodynamics—equal and opposite forces. For a Jungian or any counselor who has adopted a self-actualization model as the basis for his operation, the mechanism may be only a tendency. Man is seen to have an inclination to become creative and self-fulfilled. Once this tendency is set into motion all the king's men and all the king's horses cannot stop the mechanism from yielding increasing self-development. Within all of the systems of counseling are views of mechanisms which could be broadly classified as adaptive, maladaptive, or corrective. These are processes which, if (1) adaptive, yield to the individual personal and social fulfillment; or (2) maladaptive, employ defensive, self-protecting mechanisms which detract from his ability to become fulfilled; or (3) corrective, permit either by an innate tendency or by some supposed direction a readjustment of maladaptive processes.

Examples of mechanisms are abundant. In psychoanalysis, one of many mechanisms is sublimation, a process which releases psycho-sexual energy in socially productive directions. In behavior modification, reinforcement processes strengthen the likelihood of the appearance of certain behaviors. In Rogerian and existential counseling, a self-actualization mechanism promotes the fulfillment of the self.

Once a theoretical position is assumed and mechanisms—adaptive, maladaptive, or corrective—are supposed and perhaps demonstrated, it is necessary then to train a counselor to be able to affect corrective mechanisms and to promote adaptive ones. Even though the counselor cannot actually "get inside his client's head" or affective system, he must have certain skills or abilities which will, when applied, affect corrective and adaptive processes. Once the counselor sets into motion adaptive and corrective processes, the outcome is at least assumed to be a healthy, productive stance for his client.

59

Consider Figure One again, points one, two, and three. Assumptions about human nature, causes and maintenance of behavior, and mechanisms of behavior change fit into a logical, deductive pattern. If I assume that by nature man is cognitive and rational then I am likely to deduce mechanisms which reflect tendencies to rationality, tendencies to styles of thinking which resemble Aristotelian logic. I may find that when things go wrong it is because individuals have misclassified information and have employed false logic. Within such a system is a coherence and internal consistency which, by standard logic, fits the deductive process. But given the assumptions of mechanisms, what will the counselor do to affect the corrective and adaptive processes? There, at that point, the deductive process ceases. What counselors must do to influence performance change of a client cannot be deduced by any logical means from the assumptions of human nature, causes and maintenance of behavior, and the mechanisms of behavior change. Counselor competencies cannot be deduced from counseling systems.

Consider Carl Rogers' assumptions about human nature and what causes a person to act the way he acts, be it in a healthy or unhealthy mode. Within the Rogerian approach, eye contact, clarification and rephrasing, postural positioning, and certain modes of verbalizations ("mm-hmming"), are often employed. However, we cannot draw those particular strategies and techniques out of assumptions of differences between ideal and perceived self and efforts to achieve self-actualization. Reasonably those techniques that a counselor might apply may fit the broad phenomenological system of Rogers, but we still cannot formally deduce rephrasing and clarification from the assumptions of human nature, etc. I would not anticipate seeing a Rogerian counselor employ negative feedback in order to shape a client's behavior. That strategy does not seem to fit the rationale and conceptualization of the Rogerian position regarding the production of a positive climate in which the client may express himself. Nevertheless, the strategy of negative feedback has not been demonstrated to be ineffective in promoting the aim of self-actualization.

60

For illustrative purposes, I would like to draw upon a rather familiar film to many individuals in counseling. This is the film of *Gloria*, a woman who was interviewed by Fritz Perls, Carl Rogers, and Albert Ellis. The film served a purpose of showing marked distinctions among the three views of these leaders in the areas of counseling and therapy. Also in the concluding portions of the film were opportunities for the practitioners to express their views and their assumptions about this client.

I would like to take Ellis' position in Rational-Emotive Therapy to demonstrate the deductive process and the difficulties of moving from estimates of mechanisms of change to competencies counselors must have to affect change in the Rational-Emotive system. I would like to reemphasize that the discontinuity between the deductive process and the identification of counselor competencies is not peculiar to Rational-Emotive therapy, but rather, common to virtually all viewpoints in counseling.

The essential element of man in the Rational-Emotive system is his rationality. Basically man is rational; basically he is good. Although there may be other assumptions about man he is, at the very base, a rational being. He has a tendency toward rational thought and these cognitive processes form the core of behavior and emotion. How one sees the world, labels it, and logically assembles his perceptions depend upon rationality. Adaptive activity, that is, activity which is productive for the person and society, stems from rational processes. Maladaptive activity, frustrations and anxieties stem from irrational thought, which somehow produces an ineffective, uncomfortable individual. Rationality is an adaptive mechanism; irrationality is maladaptive. But within this system is still the operation of a tendency for man to move toward rationality, a corrective mechanism. The form which logical processes take in the Rational-Emotive system is that of the Aristotelian syllogism. If man is good and John is a man, then John is good. We know however that we can misclassify key terms within that syllogism and our final statement can be in error. That is, the conclusion can be irrational. Rational-Emotive therapy is an approach to change which focuses first upon the detection of irrational

61

processes, erroneous classifications of the events about a person, and the consequences of that classification style.

Given these general themes, what is it that a counselor must be able to do in order to effect correct and proper thought processes? We have reached the point of the discontinuity between point number three in Figure One, mechanisms of behavior change, and counselor competencies to affect corrective mechanisms. A counselor in the Rational-Emotive system, in a broad sense, must be able to recognize evidences of irrational thinking. He must be able to recognize rational thinking. He himself must be able to demonstrate rational thought. One who thinks irrationally himself cannot help someone else to think rationally. In some fashion, he must be able to model or demonstrate rationality. What about his communication skills? What kinds of competencies must he have in that area? He must be assertive; that is, he should be able to inform a client that the client is thinking irrationally. He will have to be able to convince the client of that particular position—that irrationality leads to maladaptive performance.

The broad competencies that I have described are descriptions of how the counselor must act, but not what it is he must do to convey his position. How, specifically, is a Rational-Emotive therapist to act in order to produce the desired changes in the client? We have detailed general themes of expected performance, but the deductive process has taken us only to a statement of general competence and still leaves us suspended without any guidelines to generate ideas of specific acts which will fulfill the intents of the system.

How shall theory-generated competencies be assessed and evaluated? I have tried to illustrate the discontinuity between the deduction of events and conditions and what a counselor is supposed to be able to do to implement those abstractions and suppositions. What has materialized in the absence of specific directions and guidelines for actions counselors must take in order to produce outcomes for clients which are consistent with viewpoints the counselors assume, are limitations of the prime models or originators of the systems themselves. It is interesting that Carl Rogers has never claimed that

practitioners of his approach must interview in the manner in which he interviews. Albert Ellis has never said that one must act exactly as he acts in order to be an effective Rational-Emotive therapist. However, followers of those individuals and many others have in effect codified those prime models' performances and have set them as templates to which all trainees must conform in order to be effective counselors.

As a result, counselor trainees are evaluated on their fidelity to the model of a system and not upon the effect they may have on client performance. What is the justification for assessing trainees on their faithfulness to some assumptions about human functioning and not on the effects they may have upon a client? Simply, if the assumptions are correct and a counselor works in a manner consistent with these assumptions, he cannot help but have a beneficial effect on his client.

Within these systems assessment of counselors and counselor trainees tends to be process directed, that is, assessing how well an individual performs a given task, how well he pursues assumed steps in a counseling sequence, and how he looks in the process of conducting those steps. Assessments rarely tend to be related to outcome, which may be defined as the effects of these sequences, steps or rituals upon the client's desired performance change. Assessment, then, is internal to and consistent with the broad system which determines general directions for competencies.

In the systems that I have described, accountability in its fullest sense cannot be realized. Justification of one's acts with clientele in relation to their objectives must be evaluated only within the theoretical or conceptual views which were formulated at the outset of the deductive process. Customarily, public accountability for one's performance requires objective determination of one's actions outside of the system in which one acted.

I have attempted to describe briefly events surrounding the generation of counselor competencies from theoretical or conceptual views. I have tried to illustrate efforts to deduce counselor competencies and the inherent discontinuity between the logical process and the eventual description of what a

counselor must do in order to act within a particular conceptual framework. I have also attempted to identify assessment, evaluation, and accountability problems related to counselor competencies within a given framework. By the very nature of the conditions framing theory-based competencies, assessments must become process-oriented. Concerns are much more directed toward fidelity to certain models within the system at the expense of attention to outcome for the client.

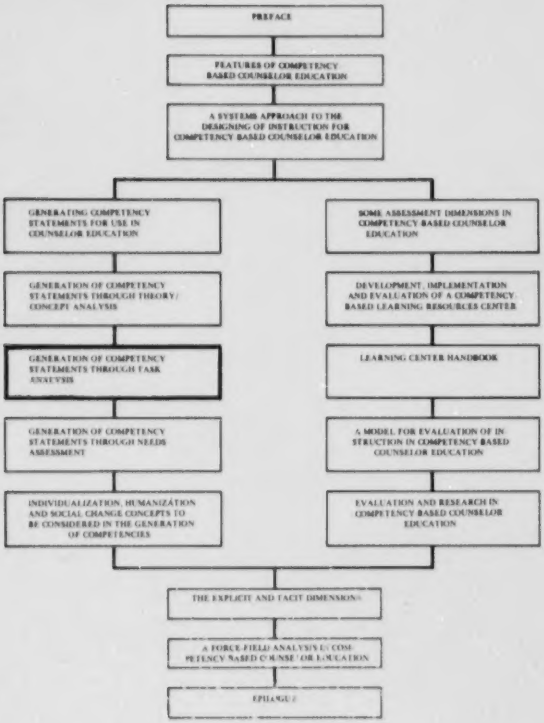
What purpose can theory-based competencies serve within an educational program for counselors? I have described certain limitations which need to be considered when examining the source of competencies within any counselor educational program. I will take the position that counselor education programs solely dependent upon theory-generated competencies have certain lacks which are creating increasing concern among counselors in the light of demands for public accountability for service processes.

Nevertheless, there are certain needs for competency directions generated by philosophical views. Theory generated competencies begin with value orientations, assumptions about the worth and nature of people, and social orientations which frame the context in which counselors must operate. To disregard these value orientations can lead counselors to operate in violation of standards within a community and/or of value frameworks within which their clientele must operate. Counselor educators and counselors must on the one hand recognize and work within value systems and frameworks, but on the other hand, must produce effective change processes consistent with those value systems. These are two distinct issues. Reliance upon theory-generated competencies alone may not generate the concrete array of skills necessary to produce effective counselors. However, disregard of philosophical orientation may produce directions of counselor actions in conflict with human and social values.

64

Generation of Competency Statements through Task Analysis

Ivor K. Davies


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
LEARNING CENTER HANDBOOK
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
A MODEL FOR EVALUATION OF IN STRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE-FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

65

Generation of Competency Statements through Task Analysis*

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There are a number of ways in which competencies can be isolated and identified. I want to describe to you a method which is called task or functional analysis. Before I do this, however, I would like to distinguish between two terms which I think are key in terms of identifying and using competencies. One of these terms is concerned with "acquirement," and the other is concerned with "accomplishment."

Acquirement and Accomplishment

"Acquirement" involves all those things that people can do: their repertoire, if you like, of behaviors. Normally, as I've suggested earlier and as some of you saw in the descriptions of program competencies, acquirement is concerned with a long list of things. You must be able to do this, and you must be able to do that. The lists go on and on and on in a seemingly endless fashion. Indeed, the purpose of so many educational programs in counseling, for instance, seems to consist of long lists of competencies that students have to acquire in one way or another. By chance they come in with a small list of things they can already do, and go out with a very long list of things they can do as a result of training. So the purpose of training, the purpose of the program, is to lengthen the list. As a result, we often carry out our analysis in terms of what we should add to the list of what they know already. In other words, we set out to find out what they don't know, and what they should accomplish. I want, however, to highlight an additional thought, this involves the twin concept of "accomplishment."

Accomplishment is concerned with the *value* of what a person knows. This discrimination is an important one, because it seems to me that all too often we work on the basis that when there is a deficiency in a student's knowledge or performance, then it is a deficiency in acquirement. In other words, something

*This paper was originally presented at the Second Annual Mutual Development Lab in Competency-Based Counselor Education, Indiana University, May 7-8, 1975.

is missing from the list. I want to suggest, however, that more often, it is really a deficiency (as far as adults are concerned) in accomplishment rather than a deficiency in acquirement.

Let me give an example. Everyone of you in this room can do everything that a bank teller does at the First National Bank in Bloomington. There isn't a single thing that the bank teller does that you, as of this moment, could not do. So you have all the behaviors present in your repertoire. What you don't have is first, the order or sequence in which those things are done, and secondly, the cues which trigger the bank teller into certain types of behavior. Now think of it in terms of a training program. If I work on the basis that everyone in this room is ignorant, then I've got to teach you the whole of the job of bank teller. That would be an enormous and lengthy job. However, if I work on the basis that everybody in this room knows everything there is to know about bank telling, except the sequence of the cues which trigger off particular behaviors, then my training program is very much smaller. In other words, small change in your acquirement (sequence and cues) can result in an enourous change in the value (accomplishment) of what you know.

I'll give you a further example just to drive the point home, because it's so important. As many of you know, there is a color code for resistors. Color bands are painted around resistors, so that you will know the number of ohms of resistance. Now I could work on the assumption that, since few of you are presumably scientists, few people in this room know the color code for resistors. In other words, that you're ignorant of the color code, and so I've got to teach you it. In effect, I've got to increase the length of your list of acquirements. If I work on the basis that everyone in this room already knows the color code, but doesn't realize it, then my job's much easier. For instance, most of us associate color and numbers. We know about a brown penny, we associate brown and one. Brown equals one on the color code. So I am really revaluing what you already know. For instance, we have a concept of two red lips. In the color code, red equals two. You already know that. If you're musically inclined you'll know

that Prokovieff wrote a piece of music called "The Love of Three Oranges." So you know that brown equals one, or one equals brown; two equals red, or red equals two. You have not only learned this by a mnemonic, you have free access to it. I could go on. In England, for instance, we talk about people having "five green fingers" when they are natural gardeners and can grow anything. On the color code, five equals green. So it goes on, and you can see that a small change in acquirement can result in an enormous change in accomplishment.

Now the problem in terms of a great deal of task analysis is that people carry out a big analysis of all the things that people need to acquire. These they list as competencies. They then work on the basis that people are ignorant and that somehow they have got to acquire them. That's true of children where you're teaching children a basic repertoire of skills, but not necessarily for adults, because adults know an enourmous amount. Therefore, our job in terms of adults should be to carry out also an analysis in such a way as to find out what people already know which is relevant to the program. Instead of assuming that people are necessarily ignorant, we should assume they are wise; that they know most of what there is to know. What we need to do, in these circumstances, then is to point out one or two things.

Knowledge Structures

Now having pointed out the context of task analysis, how do we carry one out? Well, there are many ways, but let me very quickly suggest one. Think both in terms of the person as well as the task. Notice I'm not divorcing person from task or task from person, which is what I think many competency-based programs are doing. They're only analyzing the task, not the people. In terms of both components, I think that we need to distinguish a number of things. Let me use my own vocabulary as a psychologist for a moment. (You can look this all up in my book called Competency-Based Learning published by McGraw-Hill in 1972, if you really want to.) I want to distinguish five different types of knowledge structure, or domains which I'll deal with very quickly in a moment. These are first, signals; secondly, chains; thirdly, multiple discrimin-

ations; then concepts; and finally principles. Outside all of these, are something called strategies.

Signal Structures. Now I'm saying the purpose of task analysis is to identify such structures, then to identify them in the form of competencies. Let me deal very quickly with what these structures are. Also I'll try and point out why it's worthwhile recognizing them. A signal is simply a S-R situation. When I say "light," I expect Cherryetta to stand to attention and say, "Light is the vibration of that hypothetical . . etc." In other words, when I give you a signal to do something, you do it. If I ask you to define something and you do it. If I ask you to list something and you do it. Unfortunately and unnecessarily, a great deal of training is concerned with signals. So one of the things a competency-based program identifies is what signals you are expected to respond to. One could define out of the three extracts you have in front of you, for instance, three types of therapy. By the way, the main way of learning signals is to sit down and learn them. There isn't really any shortcut. It involves a constant continuity of the stimulus with the response. And that comes from practice. So you sit down and learn by rote.

Chain Structures. A chain is a whole series of things which are carried out in a predetermined sequence. Changing the wheel on a car is a chain. There's only one way of doing it. That is, you have to jack up the car before you take the wheel off. If you don't, you're in trouble. Tying your tie is a chain. Tying your shoelace is a chain. Solving an algebraic problem is a chain. A chain, though, begins with a signal, otherwise you won't know that you have to engage in a procedure, and it also ends with a signal, otherwise you wouldn't know when to stop. A flat tire signals a chain, for instance. Now it is very important to identify chains. One thing leads to another thing, and that leads to another thing. The sequence in a chain is predetermined. Writing out a check to a large extent is a chain. You write the date, you write the name, you write the amount, you sign it, and you put something down at the bottom. Filling out your income tax form is a chain. Life is full of chains. Something like 90% of the things human beings do are chains.

It's important to recognize chains, because very often chains are best acquired retrogressively or backwards. Let me give you an example. A little while ago, my son said, "Daddy, won't you teach me how to tie my shoelace." Now tying a shoelace, as I have said, is a chain. I said, "Okay, Simon, this is what you do. First of all, take the two ends of the shoelace like that and make a crossover. Simon, are you watching? You then make a . . . For God's sake, Simon, watch me, not the television. And then you cross it through there, pull it through, Simon, and then the very last thing you do is to pull the two bows tight."

"Yes, Daddy, I know you can tie your shoelace, now won't you teach me how to do mine."

Then I suddenly remembered that I'm supposed to be a psychologist. So I say, "Okay, Simon, pull those two bows tight."

"Daddy, I've tied my shoelace!" And so we move backwards or retrogressively through the sequence, and at each stage he ends up completing the chain, for there he has a tied shoelace in his hands telling him that he has been successful.

Now by working backwards through a chain, you have an enormous series of advantages. One, every terminal act is a completed act of the chain. It is, therefore, self-reinforcing. Two, it's impossible to teach somebody to do a chain, they can only learn it. Did you notice that every act in the progressive sequence, I demonstrated myself. I did it. When we did it backwards, Simon did it. And thirdly, and more important than any of those, when you teach a chain backwards, the first act that is carried out is the new act that is just being acquired or introduced. The next act, which follows, has already been rehearsed. Therefore, the memory load is far shorter and there is likely to be less interference.

When you teach something progressively, then they do the steps or acts that are already known first, before coming to the new act that is just being acquired. There is, therefore, an enormous amount of competition—stimulus competition. So a very good rule of thumb in terms of chains is to seriously consider the advantages of working backwards. Chains account

for something like 90% of most human activity, and that alone is a very good reason for identifying them.

Discrimination Structures. The next thing that you need to do is to recognize discriminations. A beautiful example of a discrimination is to be seen in the three descriptions you have on the piece of paper in front of you. There are three things you will want to discriminate: between Rogers, Perls, and Ellis. What are the similarities? What are the differences? What's the significance of the differences; what is the difference of the similarities? There is an important teaching point here in the discriminations. So you will want to insure that people learn to make those discriminations. One way of doing that is to present all discriminations at the same moment of time—never to present them separately, but always together. Did you notice that when I presented you with the color code for resistors I tried to give you all the discriminations between color and number together and as quickly as possible? When I wrote up those structures on the board, I wrote them all up at the same time even though they meant nothing to you. So a reason for recognizing discriminations is the fact that they need to be identified and presented all together. Now a minority of human activities are concerned with discriminations, but discriminations involve some of the most important things that any learner needs to acquire. An it's in discriminations that professional competence to a large extent is found to exist. It's discriminations that result in craftmanship.

Concept Structures and Principle Structures. Now a concept is a generalization, it involves identifying a class of objects, qualities or relationships. Most of us, for instance, have a concept of "light," or a concept of "happiness" or a concept of "love." How do you acquire a concept? Well, a concept is not incremental to any large extent. You either have the concept or else you don't have it. And, therefore, the way to acquire a concept is to be presented with the total situation, the totality, so that you can make the generalization and discriminate between the concept and all other concepts with which it might be confused.

Principle is simply a chaining of concepts, which suggests that you present the concepts backwards, or retrogressively. The principle of Ohm's Law, for instance, consists of a chain of concepts dealing with charge, resistance, potential difference, and electro-motive force.

A Strategy. A strategy is a methodology of dealing with something. It needs to be taught. Unfortunately, we leave most students to acquire strategies for themselves, as with problem solving strategies, rather than help them acquire them. Counseling, overall, I suspect, could well be a strategy. It's a strategy of using signals and chains, of recognizing multiple discriminations, and of making generalizations or gaining concepts. It's a strategy of use. It's a strategy of doing, of putting things together in a meaningful way, so as to convey meaning. To devise, in other words, a plan of operations.

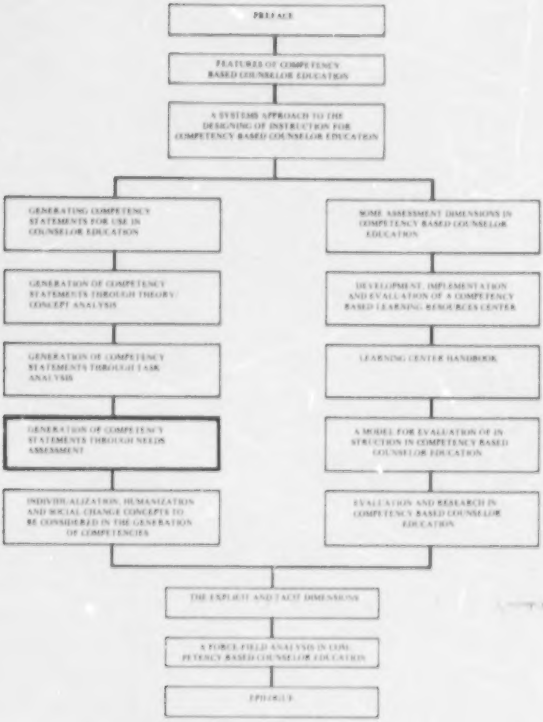
Ultimate Purpose of Task Analysis

In terms of task analysis, your problem is then to define competencies. You need to isolate and identify, as a result of the analysis, the information structures. What are the signals? What are the chains? What are the multiple discriminations that you want people to acquire as a counselor? What are the concepts that they need? What are the principles that they need to acquire? What are the strategies that they need to possess? Now the aim, having identified them, is to determine how they are to be included in the trainee's repertoire. Some type of learner analysis will, therefore, be necessary so as to determine whether the training program is one of "acquirement" or "accomplishment." Always remember that with adults the problem is often more one of "accomplishment."

Such knowledge structure may well underlie the competencies that everybody in the world possesses. Therefore, your job as an analyst is to highlight the signals, to highlight the chains, to highlight the discriminations, concepts, principles, and strategies. If you describe competencies in this way, you're identifying not only the character of the knowledge structure involved, but also a range of associated teaching structures that can be employed for establishing them in the learner's repertoires.

Generation of Competency Statements through Needs Assessment

Frank DiSilvestro


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF IN STRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE-FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Generation of Competency Statements through Needs Assessment*

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I would like to talk about the needs assessment approach to identifying counselor competencies, touching on three questions:

1. What are needs assessment generated competencies?
2. What would such an approach look like in a counselor training program?
3. What are the advantages or disadvantages of this type of approach?

Let's start with the first question on the nature of competencies generated by a needs assessment. Simply stated, they are competencies required by particular types of workers, which are based on the assessed needs of a society, particular community, school population, or small group of individuals. Competencies based on the needs of a certain group have legitimacy because they are typically designed to meet or reduce the specific needs which precipitated them. The competencies are designed to hit the target, in this case the population needs for counseling services. Now, I want to illustrate how these needs typically are identified and what types of counselor competencies derived from needs for counseling services have priority.

In terms of societal needs, I can draw an example from an interesitng and very appropriate study entitled "Education's Contribution to the Quality of Life of a National Sample of Thirty Year Olds" (Flanagan, 1975). This study is based on a sub-sample of 1,000 students who were 15 years old when tested in 1960 as part of Project TALENT, a larger longitudinal study of 400,000 secondary students. This aspect of Project TALENT sought to assess the quality of life of the typical 30-year-old in this country. Since I am myself 30 years old, I found the study particularly interesting. According to the study, the typical 30-year-old reports that his quality of life is

*This paper was originally presented at the Second Annual Mutual Development Lab in Competency-Based Counselor Education, Indiana University, May 7-8, 1975.

quite good. Components receiving high ratings, indicating quality in the lives of men and women, were physical and mental health, a close relationship with one's spouse, and work that is interesting, rewarding, and worthwhile. A few generalizations suggested by the study indicate specific needs clearly appropriate for the development of counselor competencies. For example, the authors reported that certain learning experiences could have been provided to enhance the quality of life. To quote them, "The most important unfilled need for the majority of these young people was an opportunity to learn about themselves in relation to life and career planning. They needed to learn how their values, interests, and abilities relate to possible life styles and opportunities for careers" (p. 107). It was also reported that:

> an opportunity for making a contribution to the quality of life of some of those young people relates to those individuals who report emotional problems in their homes that interfere with their school work and personal development. By providing a supportive homeroom teacher or some similar arrangement that would offer continuing professional assistance and advice to the student many of the unfortunate observed side effects of such home problems could be substantially alleviated.

On the basis of this particular study, we can identify two areas of need for which counselors ought to develop competencies:

1. Counselor skills in helping students learn about themselves in relation to life and career planning.
2. Counselor skills in helping students with emotional problems in their homes which interfere with learning and personal development.

There are other areas which indicate the need for specific counselor competencies. Federal and State funding and legislation frequently show a need for training in a particular area. Career guidance, for example, is currently being considered under proposed Federal legislation and therefore impetus is given to the development of counseling skills in that area.

Since I work with the Indiana State Department of Public Instruction, I can speak about the needs generated at the state level which counselors must attend to. For example, the Indiana State Legislature passed Public Law Number 309 in 1971, which mandates that all public schools must report their programs under the Planning, Programming, Budgeting System (P.P.B.S.) by July 1977. Since all public schools must translate their programs into the P.P.B.S. format, counselors must be trained in the competencies needed under this system. An assessing of needs is the first phase of P.P.B.S., and, therefore, one of the competencies counselors will require concerns how to conduct a needs assessment, identifying the counseling related needs of the population they serve. This is particularly true on the local community and school district level. To illustrate locally determined needs which generate counseling competencies, let me describe a unique program sponsored by our Indiana State Department. We have a program titled the In-Service Professional Development of School Counselors. This program brings 15 counselor educators into the fifteen larger school corporations in Indiana; these trainers provide inservice assistance to the counselors in these school corporations. The trainers are there approximately every other week, for at least 16 sessions. The program reaches over one-third of the counselors in the state. This inservice assistance was in large part focused on helping the counselors identify the counseling related needs of their respective school populations. After the competencies required for performing such a needs assessment were ascertained, an actual assessment took place. The results of the assessment generated specific counseling needs, which in turn pointed to specific counselor competencies. The results from some of the needs assessments indicated needs for counseling related to career decision making and for group guidance activities, to name two. The results provide a specific direction for counselors in their respective school systems. Their competencies are now clearly related to specific needs. In this way, then, needs generated counselor competencies are based on the assessed, or clearly observable, counseling related needs of a society, community, school system or group.

The second question I would like to discuss concerns the steps in a needs assessment and what needs generated competencies look like in a counselor training program. The following chart serves as an outline of the steps in a needs assessment.

Needs Assessment Process

I. Identify Needs
   - A. Identify and list all of the populations to be served
   - B. Develop an approach for collecting the data
   - C. Design a system for utilizing the collected data

II. Select Priorities by Ranking Guidance Needs in Order of Importance

III. Write Goals for the Program and Competency Statements for the Trainees
   - A. Define goals, statements of broad direction or intent, for the counselor education program
   - B. Define measurable competency statements in outcome stated terms

Let's use two examples to examine possible competencies which might be generated through this process. Assume that a counselor training program in Indiana utilized the needs data from the quality of life study previously cited. Remember the need for career planning? Putting this together with part of the needs data from the Indiana schools involved in the In-Service Program which indicated a need for students to receive help in career planning, as well as the proposed legislation in Career Guidance, we can clearly see this evidence indicates an overwhelming need for counselors to develop competencies in career counseling. Let's examine how this would look in a counselor training program using Froehle's (1974) three-way classification for counselor competencies.

Briefly reviewing first, the three competency areas are:

1. *Knowledge*: the intellectual abilities and/or information the counselor should show evidence of having acquired;
2. *Behavioral Skill*: the use of one's knowledge and understanding in order to demonstrate prescribed counselor behaviors under specified conditions (note that the counselor's behavioral skill is the competency assessed, not the effect of the performance upon someone);
3. *Judgement*: the ability of a counselor to bring about change in others.

Here assessment focuses on the results of the counselor's knowing and doing, which are demonstrated through change in someone else.

The following simplified example illustrates what the counselor competencies for career planning might look like in this type of program. The specific criteria to judge each competency may be left to each counselor training program.

Knowledge Competencies: The counselor trainee will show evidence of understanding specific theories of vocational development. Or, the counselor trainee will demonstrate knowledge of specific assessment instruments used in career or vocational planning.

Behavioral Competencies: Given a client, the counselor trainee will select an appropriate theory of vocational development, or selected components of vocational theories, and develop a model of vocational development appropriate to the client's history. Or, the counselor trainee will demonstrate skill in the selection, administration, and interpretation of career planning tests or inventories appropriate to his client.

Judgment Competencies: Based on the counselor trainee's intervention, the client will be able to describe his stage of vocational development, will be able to name some tentative career areas of interest, will have sought information in these areas, and will be able to relate career assessment test results to his chosen career direction.

Let's look at another need which can be met by specific counselor competencies. As mentioned earlier, Indiana has a legislative mandate which requires all schools to report their programs under the P.P.B.S. format. This is essentially an accountability measure which counselors should be thoroughly familiar with. Again using our three-way classification for organizing counselor competencies, what would counselor competencies in P.P.B.S. look like?

Knowledge Competencies: The counselor trainee will demonstrate his knowledge of the Planning, Programming, Budgeting System as applied to counseling and guidance services, particularly concerning needs assessment, selecting guidance priorities, writing guidance goals and objectives, developing a program and conducting an evaluation.

Behavioral Competencies: The counselor trainee will perform, in a particular school, a needs assessment, and/or the accompanying steps under P.P.B.S. related to counseling and guidance.

Judgment Competencies: As a result of the counselor trainee's intervention, the participating school will have performed a guidance needs assessment, selected guidance priority areas, written objectives, developed and implemented specific programs, and provided for an evaluation. In other words, they will have utilized the results of the counselor trainee's intervention and changed their program in line with these results.

There are, therefore, in the areas both of career planning and P.P.B.S., specific competencies which a counselor must master and demonstrate in a counselor training program.

I'd like to conclude by looking at the third question initially mentioned in regard to the advantages and disadvantages of a needs based competency training program. I can best illustrate some of the advantages of this approach by again mentioning some of the results from the Indiana State Department's In-Service Professional Development Program. Remember that this program brought counselor educators into local school districts to help the local counselors conduct a counseling and guidance related needs assessment. The results of the needs

assessment were intended to determine counselor competencies and program direction. We found that some counseling programs reportedly took a 180 degree turn away from their previous orientation. The needed competencies, such as career guidance and value clarification, began to be seen as necessary competencies by the local school population, in large part because they had had a significant role in identifying these need areas. We found that support of guidance and counseling services was also increased because the services were not superfluous, but focused on specific target needs and populations appropriate for these services. Most encouraging were specific incidents indicating that school boards were highly pleased and receptive to guidance services and counselor competencies based on the unique needs of their school districts. This reaction is particularly encouraging since guidance budgets are frequently dependent upon school board support. In the local schools, therefore, it is clear that needs generated competencies are the most responsive and the most popular to prospective consumer populations. I have found that when a client or client system is consulted about its needs, counseling services provided to meet those needs are much better received and supported than in cases in which such needs are not taken into serious consideration. This process has the added advantage that consumers will feel less apt to be highly critical of counselor competencies and services, if the consumers have had a part in the design and implementation of such services.

There are, of course, some disadvantages to needs generated competency training. For example, what may be a societal need at this time may take a year or two to translate into a counselor training program, and this time lag becomes a drawback. Another disadvantage of the broad based needs assessment approach is that individual needs or the needs of small groups may be overlooked, as in the case in Indiana with learning disabled students whose need for counseling is high but often overlooked. This population may not be as large as populations with more common counseling needs, but this should not be a limit to the availability of guidance services. However, to my knowledge, few counselor training programs

specify counselor competencies for work with learning disabled or special education students. Another drawback to be avoided is that of needs based competencies developed only to perpetuate the status quo. This defeats the fundamental purpose of needs assessment: to identify and meet the changing needs of society. Nor do we want to become oblivious to the possibility that needs assessment data may cause counselors, and counselor trainers, to become involved in non-counseling types of activities. If we can remain alert to these possible drawbacks, and take the necessary precautions to avoid them where possible, I think we can maximize the advantages of needs based counselor competencies.

I would like to make an additional point in closing. When speaking about needs based competency training, we do not want to forget the needs which counselor trainees bring into training. Competency training must take into consideration these unique individual needs just as it considers societal or system wide needs. The investment which the counselor trainee makes in a counselor training program is frequently proportionate to the extent the training attends to his needs; just as the investment a school system makes in its counseling and guidance program is proportionate to the extent the services attend to the needs of that school population.

To conclude, I would say that I am very much in favor of needs generated counselor competencies. I believe this approach holds tremendous potential for the improvement and growth of counseling and counselor education. I hope this short talk has brought to your awareness what needs based competencies are, what they might look like in a counselor training program, and what the advantages and disadvantages of such an approach are.

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Individualization, Humanization, and Social Change: Concepts To Be Considered in the Generation of Competencies

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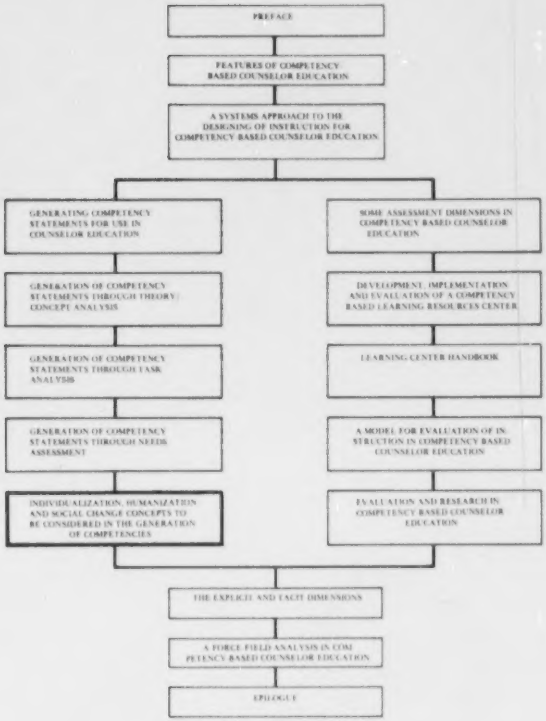
PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Individualization, Humanization, and Social Change: Concepts To Be Considered in the Generation of Competencies

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This essay is an effort to analyze models for generating competencies—specifically the models outlined by Robert Houston and the one proposed by Thomas Froehle, all of which were offered as alternatives for the Competency-Based Counselor Education Task Force. The models are analyzed as they relate to the concepts of individualization, humanization, and social change, for these three concepts are among the many used by writers in the field and advocates on the Task Force to build a rationale for the adoption of competency-based learning (CBL) and to argue the value of competency-based learning. This writer believed that if CBL was a potential vehicle for the individualization, humanization, and radicalization of education, these accomplishments would be evident in the very first moves toward building competency-based programs—in other words in the generation of competency statements. Thus the writer began to examine these concepts as they are used both generally by writers describing CBL and specifically by those describing competency generation models; to compare the use of these concepts in the CBL context to other alternative uses of the terms; and to determine the meaning of the concepts in the models described by Houston and Froehle.

In *Developing Instructional Models*, W. Robert Houston discusses "several approaches to identifying teacher competencies" that "have been employed or are theoretically possible to use."[1] One approach is *program translation*. It involves taking previous subject matter and/or courses and formulating them in competency-based terms. *Task-analysis*, another approach, relies on the actual observation of the practitioner for discovery of the kinds of skills, or knowledge needed to perform a job. Competencies are written from the analysis. Input may

be obtained from trained observers, other faculty, students, etc. The *needs assessment* approach is similar to task-analysis in that it, too, focuses on the consequences of teacher action. However, in this model, the needs of a society, sub-group, school, or community are the subject of the analysis and the specific objectives are derived deductively. In the *cluster approach* a number of curricula areas are identified and the specific requirements necessary to bring the student to a mastery of the content and skills of these areas are deduced. The difference between the cluster and the program-translation approach, is that in the cluster approach only the major areas of concern and not the entire subject matter are chosen prior to the construction of the curriculum. In another of the approaches outlined, a *theoretical position* is adopted and becomes the basis for a competency-based curriculum. Finally, Houston also mentions the *child-centered approach*. The children are analyzed, as well as the goals of the school and curriculum, and writers use this information to determine what the children should be like and then to write competencies aimed to get the children to this ideal.[2]

However, Houston's description of the child-centered model differs from the client-centered model described by Froehle. In Froehle's model, the first concern is the client's or student's welfare and the focus is on the client/student and his needs rather than on the school, society, or curriculum.[3] Though Froehle doesn't expand on this point, the implications are clear. The school and other institutions may be changed or altered to meet the needs of the client/student. The purpose of schooling is the preparation of individuals who can cope with their own needs with integrity, rather than the preparation of individuals for slots defined by other people or by predetermined standards.

Regardless of one's position on CBL, individualization is a central concept. There seems to be a common agreement that the individualization of education is important to the production of free-thinking and creative individuals who can produce and improvise in uncommon and demanding situations. In fact, the concept of individualization has been used to champion nearly

every new educational and reform proposal in the last decade. This may be the result of the current critique of our society as alienating and anti-individual. Individualization has become a cause, though individualization as a concept means one thing to the critics of CBL and something else to the advocates. Just as the educational reformers at the turn of the century changed the meaning of the concept of equal opportunity from "the same instruction for everyone" to education based on "each individual's need," so the advocates of CBL have redefined the meaning of individualization from its popular meaning in the 1960s with its stress on individual rights and autonomy to the meaning of individualized instruction.

For example, Houston and Houston, say that "the importance of individualization cannot be over-emphasized."[4] Arguing for the adoption of CBL, they claim that "individualization" is one of the components of CBL which would diminish the centralization and depersonalization of our society and educational system.[5] In their discussions of individualization, its meaning becomes clear. They argue that "competency-based programs are characteristically individualized" since they are "self-paced and thus time is a variable."[6] They are personalized as well; each student has some choice in the selection of objectives and learning. . . though "not all instruction is oriented toward the independent act."[7] By this they mean that groups, discussions, and lectures may be used to facilitate learning, though the main activities are individual. Furthermore, evaluation or accountability is shifted to the learner's attainment of a set of objectives. He is no longer "judged by his standing relative . . . to the group."[8] In other words, the grading is criterion-referenced and not norm-referenced. Instruction is called individualized when each student can progress at his/her own rate, can enter and finish programs based on their completion of a set of objective criteria, and has some choice in the way in which he/she meets the criteria. Under this definition even the military training programs can be used as examples of individualization, since the instruction is individualized and personalized and, as Keller argues, contains all the elements of individualized instruction.[9]

However, in the 1960s students and many educational reformers demanded the right of students and communities to have a significant, if not a controlling voice in the choice of subject matter, programs, skills, and ways of gaining skills. These demands constituted more than the right of an individual to progress at his or her own rate. Some talked of learning without programs at all. Many attempted to institute their curricular proposals against the will of the administrations of universities, schools, and various professional groups. They thought that their perspcetives should be accepted as viable and that the articulated concerns of dissenting groups should be respected. Individualization meant more than traveling "non-competitively" through a predetermined set of objectives, meeting someone else's criteria. It meant that individuals should have the right to define criteria. It meant the right to question and challenge every existing social and political structure. It meant the right of individuals to control what, how, and from whom they learn. A respect for the worth of the individual and a guarantee of individual autonomy were basic tenets of the reform philosophy. For the reformers of the sixties, and especially the youth of the sixties, believed not only in the possibility of the individual as a change agent but also that the worth of the individual should be a social norm. The Vietnam War, the blatant use of persons as guinea pigs for dangerous experiments, the pervasiveness of the factory, and corporate models where the individual and his goals were ruthlessly subordinated to the goals of some larger entity were all recognized as the forerunners of totalitarianism and oppression. The perimeters were broad and the concept radical in their definition of individualization.

In one sense CBL advocates hope that it can meet these radical terms for individualization. Note Houston and Howsam's reference to giving students "some choice in the selection of objectives and learning activities."[10] Robert Burns argues more extensively:

> However, behavioral objectives can be specific without requiring uniform behavior of all learners. Thus an objective of a particular learning experience might require the

> learner to write an original short story. Although the required behavior must fall within certain specified limits, uniform output from all learners is neither demanded or desired. When the learner has an opportunity to be the prime determiner of his own objectives and to perform self evaluation in terms of those objectives, his opportunities to grow and flourish are enhanced. He sets his own personal goals, helps to select his own curriculum, and takes increasing responsibility for control of his own education. Used in this fashion, objectives can only enhance the learning process, even from the humanistic or developmental viewpoint.[11]

But significantly, even Burns does not suggest any built-in mechanisms whereby the learner would have ultimate control over the objectives. Though he argues that everyone should be involved in the specification of objectives and though he says the learner is the "prime determiner" of his own objectives, Burns does not show how the learner gets his power. Moreover, in the section on the determination of objectives Burns admits that the power to set objectives tends to rest with those who make other decisions in education, and though he cites examples of attempts to include learners in the decision making process,[12] he clearly does not define individualization in the most radical sense. "Personal goals," "choices of curriculum," and "control over one's own education" are defined as functions within a larger system.[13] There is none of the political or ideological power that characterizes the radical definition of individualization. Burns' description of individualization parallels Keller's and in Keller's estimation military instruction programs meet the prerequisites of individualized instruction. As we well know neither the larger goals of the military nor the uses of technological training are submitted to the student for evaluation. For though the student in the military may be free to become a radio operator by any number of methods, though he may even choose the specific one and he has time to complete the program at his own rate, he is powerless to question the military establishment or the use that establishment makes of his skills. Individualization is

expressed as a one dimensional idea—individualized instruction. Instruction may be personalized and individualized, but the power over its direction is still centralized and depersonalized. In both the Burns and Keller examples the total system is paramount—more important than any individual. And the individual's choices are defined in terms of the system.

In fact individuality, as CBL advocates define it, has frightening possibilities. How does one discuss a value-loaded question with a computer or a teaching machine? How does one challenge the racism of a test question or an assigned reading? How does one individual, stripped of the day-to-day interaction that occurs between students and teachers in the more traditional classroom, gather enough power and peer group support to attack the teacher or any other person formulating the instructional program? And how does a single, isolated individual deal with the arbitrariness of evaluators when he sees them only as an individual? This is a serious problem, and one that may make it even more difficult for the learner to present his ideas and have them heard. Thus the individualization of education by CBL, in the face of diminished student power, may lead to more conformity. This is individuality in a limiting sense. It is individualized instruction without a guarantee for the protection of individuals. It is individuality founded in the belief that experts should define programs and students should perform within them.

Of all the models Houston outlines, only one uses individuality in the more radical sense. That model is the *client-centered* or *child-centered approach*. Here the individual, being served, can truly be the focus of the educational enterprise. He may define his own needs—needs which the educational system, in this case through the use of competencies, attempts to answer. However, there is still a vital question to be asked. If as Houston claims ". . . the children themselves are analyzed, what they are like, what are the goals of the school for them, what is the school curriculum like, and from all this, what should teachers be like?"[14], then the child-centered approach comes back to the same problem as others. That basic problem is that the power for analyzing, for determining goals, and for building

curriculum still rests beyond the control of those taught, or served and especially beyond the control of those being trained as counselors/teachers.

As for the remaining models, since they require a team of experts, a task or job, needs of society, or old programs and theories as their beginning and their measure of legitimacy, it seems that they can only be called individual in the sense that they allow the individual to work alone and at his own rate. And in that sense they can never, in the writer's opinion, provide for individualization in the fullest personally and politically liberating sense.

A term common to both advocates and critics of CBL is the term *humanization*. In using this term both groups tend to be talking about distinctly different things. Humanization, for the advocates of CBL, is the rooting out of old hierarchies and power structures which tend to confuse and exasperate students. Humanization involves leveling with students and the public on the requirements for courses and the student performance that is expected. Everything is above-board and public. For each course and/or program, what is required is stated and an acceptable end product is defined. In this way, the teacher no longer can hide his goals or expectations from the student without being obvious, and the public and the consumer of educational products know exactly what these products can do and can thus hold them accountable. Moreover, CBL counts as one of its more humanizing aspects open admission which, it is claimed, will eliminate subjective admission policies and give anyone a chance.

Finally, the whole rationale for CBL is said to be humanizing:

> ". . . the system of instruction must be redesigned until all the students succeed. In this sense, the cybernetic systems approach to education is far more human than (sic) traditional approach in which the student receives the blame for the failure, not the teacher."[15]

No one gives a more poignant argument for the humanizing side of CBL than Perry E. Rosove. And Rosove's analysis goes beyond the programatic changes of CBL. Basing his case on the fact that to enter any one of the professions (engineering,

medicine, architecture) a student must master certain skills, he implies that society sees "a physician who has been trained in many skills as 'an educated man.' "[16] Further, he argues that the setting of objectives by the teacher—for example "dissecting a cadaver"—does not "detract in anyway from the humanity of the student or from the capacity of the society to be humane."[17]

> Surely a society is no less humane for having physicians who have learned their anatomy lessons well; nor is a society less humane for having engineers whose bridges and tunnels do not collapse; nor for having architects whose houses are not only beautiful, but also may stand the onslaughts of nature for more than just a few years. Nor will a society have fewer humane people or be less of a humane society because educational technique requires educators to define their goals more explicitly than heretofore.[18]

Each of the approaches to competency generation meets the test for humanization in one sense, for each ends up with a product that tells students and the public what is acceptable and passable for that program. For example, with the program translation approach, the once perhaps hidden goals are more specific, requirements are spelled out, and students/publics may examine the old courses in terms of exactly what they claim to produce. In task analysis, someone tells the student/public exactly which of the performances are necessary to earning a degree or certification. Likewise, all attempt, though by different ways, to get the mystery of unstated, private goals out of program requirements. And each approach to competency generation aims for the production of better trained individuals—individuals who are better equipped to counsel/teach and who can, and try, to be held accountable to the public.

But humanization, as discussed by those opposing CBL, goes beyond the mere statement of clear objectives and the training of skilled individuals. The most oppressive system could be humanized in the terms of those who define humanization as do the advocates of CBL. For a system could define objectives, clearly state them, make no bones about the

requirements and still contribute to the oppression of people and to their dehumanization. The opposition asks if humanization can be achieved or claimed by a model which argues for it on the basis of honesty, openness, and admission policies.

In other ways, CBL is not nearly so potent a force for humanization as its advocates would have us think. Take Rosove's discussion as an example. Everyone wants skilled doctors. But skilled doctors are not necessarily humane doctors. The meaning of humanization should incorporate more than the development of skills, though by all means the development of skills should be one of the qualities of humane doctors. By emphasizing skill alone, by making it the major prerequisite for humanization, many other components that would necessarily be part of a humane system may be ignored. "Because of our overzealous preoccupation with quantifiable and incremental competency procedures, we are becoming deafened to the cries of students for competencies in the areas that do not lend themselves to precise assessment."[19] Furthermore, the lack of interaction with the instructor may lead to the type of dehumanization which the CBL advocates seem to abhor—that is the failure to respond to individual needs. Any system which makes the students like "cogs in a machine," passing lock-step from stage to stage, is thought by some to be dehumanizing. Finally, if CBL addresses itself, through its methodology, to questions that do not lend themselves to precise assessment, then there is a danger that CBL will become a model for indoctrination. Some lessons may be better left unlearned. In our incomplete knowledge of socio-economic and racial relations, as well as in our zealous political proselytizing, it is necessary to have ever open dialogue where nothing is so precisely defined that it can be called doctrine, and where no system is so exactly defined that there are structural barriers to new ideas.

Finally, the whole question of humanization is tied to some implicit assumptions about those who oppress and dehumanize. Those who favor CBL, and see it as humanizing, tend to think that openness and honesty will change the basic subversive and subjective nature of the present system of education. They assume that oppression comes from those who withhold in-

formation and play games with students and the public. History proves that this is often the case. Those who fear that CBL itself will cause more dehumanization or contribute to it, suggest that oppression can come from anyone and that because one is "open" in requirements or admissions does not necessarily mean that he is being humane. Some opponents would even argue that CBL models, in as much as they outline and structure requirements for pupils, limit their human potential.[20] Likewise, most critics do not assume that because an instructor cannot formulate exactly what he hopes to achieve or chooses not to, or thinks that there is some aspect of learning that is beyond specification in goals or objectives, that that person is necessarily inhumane.

However, the central problem we are concerned with here is the problem of whether any approaches to competency generation are humanizing for the range of categories and groups who talk about it. Anyone who has participated in the sacred rites of passage that lead to degree granting would no doubt feel that some aspects of those rites—culturally biased admissions, psyching out professors, balancing conflicts, being forced to write exams for a subjective professor are dehumanizing in the sense that they call for unmitigated submission to the will of someone else. In this case, avoiding the dehumanization present in old programs and avoiding the dehumanization that may be part of CBL requires a new approach—something like child-centered approach but very different from that outlined by Houston. In this new or radical child-centered approach it would be necessary to look at all kinds of dehumanization, to be constantly introspective and judgmental about the effect of programs on the learner and to come eventually to a program in which competencies generated achieve validity and legitimacy only when *really* approved, evaluated, and written by all those on the receiving end. Perhaps we cannot hold others accountable for achieving what we can't verbalize or recognize ourselves, but advocates argue that at least with CBL we can be sure of what can be verbalized and thus required. We can be sure not to require things unstated and perhaps, if stated, indefensible. And we can test out objectives with the public at large.

Finally, the claim that CBL is a liberating, change-promoting strategy is another focus of controversy. Advocates of CBL argue that it challenges the bureaucracy of the university since it allows students to progress at their own rates. Unlike the traditional grading system, it assumes that each person has the potential to succeed. It requires no failure. On the other hand, those who oppose CBL argue that it extends the power of the bureaucracy by creating lockstep programs in which students become mere products and victims of a process. Advocates argue that CBL forces the system to be honest and open, and forces those in control to rethink previous notions of success, failure, and content of curriculum—that it makes the university accountable for its products and for their ability to perform in the field. But opponents of CBL see it as a self-serving strategy in which the university, posing as an objective agent, produces its own image and restricts faculty to compliance with the status quo.

> "Instead of preparing them to operationalize their desire to create open classrooms, stimulate reform dialogue and activity within the school community, and comprehend the harshest political realities of the socioeducational setting, we are exclusively stressing the necessity for component skill development along acceptable professional norms. The disastrous consequence of this is that our students perceive our efforts to prepare them to be learning specialists as nothing more than a systematic attempt to fit them into a lifetime of quiescent professional conformity."[21] Nash, Agne, p. 148.

Actually, there is some sense to the seeming contradictions. As in the other cases, the meaning of CBL as a change strategy varies from approach to approach. For example, the generation of competencies by program translation would tend to imbed and rectify old ways of doing things. It would give a look of freshness and change without requiring any additional inquiry and without challenging traditional assumptions about what the student would be like and should be required to do. And, the derivation of competencies by the cluster approach, while leaving more questions open at the beginning, still depends

upon predefined cluster areas for a beginning. Similarly, within the theoretical model, competencies generated would not challenge the theory behind them. A theory would be accepted a priori. Depending on the theory itself and apart from the obvious exclusion of other theories from consideration, this method, like program translation, could easily leave the system much as it is today, only perhaps better organized. Both the needs-assessment and task analysis model have many of the same drawbacks. Since they depend on analysis and assessment, there is no reason why this analysis and assessment will lead to any anti-status quo conclusions. Neither of the models guarantee that the final decision on competencies will be taken beyond the traditional power structure or values, or that those designated to analyze and assess will operate objectively. Moreover, the basis of both models, the observation of what is and the building on that description, obscures a concern for what ought to be and likewise a questioning of concensus opinions about schools, curriculums, and teacher behaviors. The child-centered model, may introduce significant change within the system, if it really does concern itself first and only with the child and his needs. But this is also a very difficult matter. Will the child be fitted and formed to function in the existing framework, as Houston suggests, or will he be encouraged to fight the system if it oppresses or dehumanizes? Houston's outline of the child-centered model suggests that the societal norms and school and curriculum goals will be considered *above* or *on* a footing with child welfare. And who will define child welfare?

More importantly, in none of the approaches is the authority structure reversed. Nash and Agne note:

> The failure of most current competency programs is that the teacher is always projected as an authoritative superordinate in the classroom while the child is kept in a suspended state of dependency, anxiously awaiting the cues of his teacher or the latest learning device. For many, educational reform can occur only when the roles are equalized–if not reversed (p. 153).[22]

This critique is significant even in the stages where competencies are defined. In all of the approaches outlined by Houston, final decision on who will be writing competencies rests with the experts.

Therefore, like other current reform strategies, CBL is born of the system and is based on the assumption that working within the system is the way to change. The competency-based model is seeking not only to change some of the present features of the bureaucracy but also to gain acceptance within the established bureaucracy and become bureaucratized itself. Since the model does not question the racial, political, and social goals of the educational establishments it may very well be the promoter of goals that are politically, socially, and racially conservative. In fact, as CBL seeks not only to gain acceptance into the system but also to legitimize the system, there is less reason to assume that CBL guarantees radical or liberating change. And as state governments, school systems, or other educational policy-making bodies adopt and institutionalize CBL, the model may become an instrument for limiting teacher choice and student input into curriculum matters. Thus, CBL and the various approaches to competency generation have no political power of their own. They may be utilized by any group or ideology.[24] The most significant challenge that all methods of competency-generation offer is the requirement that, at least for a time, instructors will be forced to reexamine the program of which they are a part and the products they hope to produce. But even here not all approaches to competency-generation force individuals outside their own theoretical models, ways of thinking, or problem conception and solution. In the sense that it demands the consideration of issues arising with the client or child and outside the academic or professional community, the client-centered approach is creative—though not as some claim, revolutionary—for even it is reliant for its final acceptance on the judgment and consensus of individuals and experts within the system it seeks to challenge.

In the final analysis, CBL is no more, no less than any other model for learning. The broad claims for individualization,

humanization, and social change of education through CBL are simply not justified. They are symptomatic of the enthusiasm for CBL and for those qualities thought to be "good" or "popular." A more sobering assessment suggests that the rhetoric which promises miracles for education—miracles contingent on the adoption of CBL—is based on a questionable use of value loaded concepts which indicate more to the public than CBL is likely to fulfill.

Footnotes

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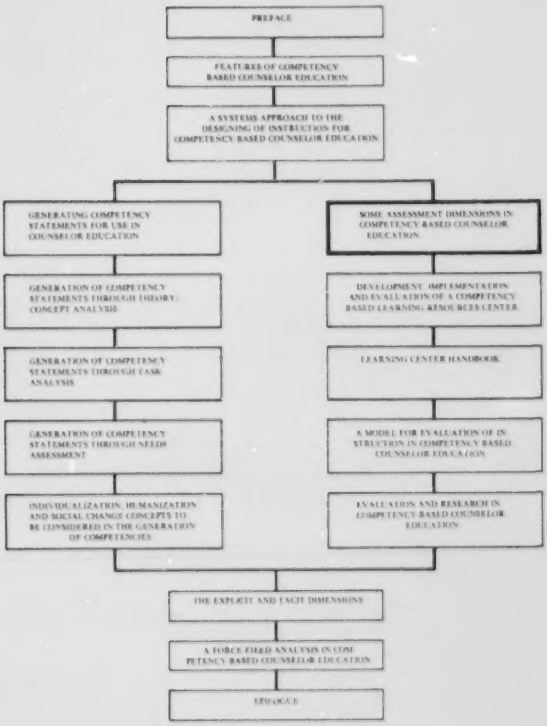
Some Assessment Dimensions in Competency-Based Counselor Education

Thomas C. Froehle


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
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GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
LEARNING CENTER HANDBOOK
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Some Assessment Dimensions in Competency-Based Counselor Education*

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Competency-based counselor education (C.B.C.E.) emphasizes a minimum standard, or criterion, of performance. Under this model a counselor trainee is not considered to be competent until he/she can perform certain prespecified skills with a specified level of proficiency. The critical task, then, is to decide what skills the counselor should perform and at what level of proficiency they should be performed. The challenge in the area of assessment is to develop procedures to identify whether or not a prospective counselor can perform counselor functions with competence.

Our experience in piloting the CBCE model suggests that disagreement comes not in the selection of alternative competencies but 1) in selecting criteria for prioritizing the competencies generated and 2) in establishing criteria for assessing their attainment. In effect, our experience suggests that the guts of competency-based counselor education is not the statements of competency but their operational definition, i.e., the specific procedures suggested for measurement of proficiency. Said another way, the criterion measures are the foundation of CBCE.

This reality poses a considerable challenge. The current state-of-the-art in the area of assessing counselor performance can only be described as dismal. The situation is hardly better when we zero in on a specific skill area within the counseling enterprise. Few would disagree that in the final analysis the most significant aspect of helping (e.g., teaching, parenting, counseling, etc.) is the ability to behave in such a way that other persons are helped. Said another way, the ultimate criterion is client welfare or the consequences of the helper's performance. The same holds true for the counselor, regardless of the more specific counselor function being considered (e.g., test interpretation, group facilitation).

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In spite of this general agreement on what constitutes help, reliable techniques for measurement of helper performance are scarce. McDonald (1972) discusses several reasons for the slow development of techniques for the assessment of teacher performance. No doubt many of these also explain the slow development in assessment of counselor performance. The very concept of "counseling skill" or "counseling techniques," McDonald might argue, has, until only recently, been repugnant to counselor educators. For a long time they were reluctant to see counseling as something other than an art in which the counselor "fashions the counseling activity from moment to moment." Second, McDonald would argue, it is difficult to apply the concept of skill to a counseling behavior. Counseling skill is "not merely a psychomotor activity, nor is it a pattern of kinesthetic responses, nor is it a set of easily programmed behaviors." Rather, a counseling skill may have many components.

Others would argue that the state-of-the-art in the study of counselor effectiveness is out of phase with the movement toward competency-based counselor education and certification. They argue that until we can establish functional relationships between client welfare and levels of proficiency in specific counselor performances or competencies, we have no sound basis for decision making (Larrabee, 1975). Surely, they would insist, we have no "empirical" basis for making decisions. The absence of such data makes it difficult to determine which counselor competencies, if any, have a positive relationship with client welfare. Resultant problems are many. First, it is difficult to determine when a counselor trainee is ready to be certified as a counselor. Secondly, it is difficult to decide which counseling skills should be emphasized and promoted at different levels of training, i.e., entry, prepracticum, practicum, and inservice, and which skills or clusters of skills should be used as evidence that a counselor has mastered the counseling act or developed the "art of counseling."

Since so little empirical evidence is available regarding the relationship between counselor skill and client outcome,

decisions as to the skills and proficiency levels needed to be an effective counselor must be advanced as theories and as hypotheses to be tested. Larrabee (1975) discusses this notion in some detail. She accepts the fact that we cannot hold back on counselor training until the existing relationships between counselor performance and client outcome are empirically demonstrated. Nevertheless, she continues, until those relationships are established, counselor educators and field practitioners must display a professional style somewhat akin to the practitioner-scientist role described by the Pepinsky's (1954) in the late 50s.

Assessment References

Because Competency-Based Counselor Education emphasizes a minimum standard of performance, some of the traditional references for assessment have lesser usefulness under the CBL model than they do under more traditional models. In the next section of this paper, we describe these more traditional references and point to specific reasons for their being discounted in CBCE.

Assessment involves the comparison of something with reference to some standard. One possibility is to assess individual performance relative to predicted or expected performance. We refer to this as *aptituded referenced assessment*. Another way to gauge performance is to assess an individual's performance at one point in time relative to his/her performance at a previous point in time. Under this assessment focus, it's the difference, the change, the growth observed between the two observation points that counts. We call this self or *growth referenced assessment*. Another approach is to consider individual performance relative to the performance of individuals in a comparison group. We generally refer to such a comparison group as a norm group and the procedure is generally referred to as *norm referenced assessment*. The fourth and final possibility is referred to as *criterion referenced assessment*. Under this referencing procedure, it's the individual's performance relative to predetermined standards or criteria that counts. In competency-based learning we are interested primarily in interpreting student performance relative to predetermined criteria or performance standards. It follows that criterion

referenced assessment is the procedure of choice in Competency-Based Counselor Education.

The four reference options are illustrated in Figure 1.

Reference	Likely Statements by Evaluators	Focus of Evidence
Aptitude Referenced Assessment	"David did poorly considering how quickly he picks up mathematical concepts."	It's the individual's actual performance relative to his/her predicted or expected performance that counts.
Growth Referenced Assessment	"Tony wasn't among the top performers, but he sure came a long way during his practicum."	It's the individual's end point performance relative to his/her beginning point performance that counts.
Norm Referenced Assessment	"Beth's third long jump placed her at the 95 percentile for girls her age."	It's the individual's performance relative to the performance of other students that counts.
Criteria Referenced Assessment	"On a criterion test with an 80% acceptable criterion level, Mark got 84 of the 100 items correct."	It's the individual's performance relative to predetermined standards or criteria that counts.

Figure 1 Reference options in performance assessment.

More in-depth consideration of the various "reference" options suggest strengths and weaknesses of each as well as more and less appropriate conditions for usage.

Under *aptitude referenced assessment*, personalization, individualization, and humanization are thought to be the most worthy of guiding values, while norms and absolute standards are thought to be mechanistic, impersonal, and dehumanizing. Nor is "growth" or "gain" per se considered an appropriate

focus for evaluation. Rather, gain in relation to potential for gain (i.e., aptitude for growth, development) is the only legitimate criterion dimension. Under this orientation, performance levels are typically predicted or expected on the basis of some measured aptitude or some former experience with the course content or skill area which makes the individual (e.g., student) different from fellow students beginning the course.

From a CBCE perspective, this reference option is most appropriately used where the intent is to measure the appropriateness and effectiveness of an intervention, a change program, a teaching strategy, or what have you. In effect, it seeks to generate a ratio index where a product or some measure of success is compared to a measure of opportunity for success. While this may be useful information, it does not get at the core issue in CBL. A second limitation, of course, is the fact that its measurement reliability is a function of the reliability of two measures rather than one. More will be said later.

Under *growth referenced assessment*, the notion of "growth and development" is valued highly. As a matter of fact, it is the absolute degree of gain in achievement that is considered important. By the same token, "gain" in achievement over the course of an academic year is considered to be the single best definition of need satisfaction or lack thereof.

The argument for "growth referenced assessment" goes something like this. Because counselor trainees enter the learning situation with varied backgrounds and different amounts of exposure to the content and skill areas around which the program is built, it is not fair to evaluate and assign grades upon end-of-course levels of achievement. Several problems are associated with this approach. For one, the procedure necessitates reliable "before" and "after" measures. This means difference or gain scores where probability of measurement errors are doubled. Secondly, even if the problem of reliability is solved, this procedure favors the least advanced students because they have the most potential for gain. More importantly, however, is the fact that this approach encourages

systematic manipulation of pre-tests by students (if they realize that evaluation is based upon gain scores). Most important from the perspective of CBCE, however, is the fact that grades based on gain or growth are not useful for placement or prediction. They give no indication of actual level of achievement.

Norm referenced assessment is perhaps the one which most of us are familiar with. Under this system, grades typically compare students with other students to denote the degree of successful achievement in units, courses, or semesters. Group norms are then used to determine where a student is in relation to the average, i.e., whether the student's performance is "below average" or "above average" or "just average" for the group. Each of us has probably had some past experience with grading curves. For example, we might recall the high school teacher who would consistently curve the grades across class sections to ensure that a certain number of As, Bs, Cs, Ds, and Fs are found at each grade level. On the other hand, we might also recall the teacher who had a reputation for being an easy grader, or, at the other extreme, that really tough instructor. Regardless of the specific norm, and regardless whether the norm was set before or after performance was assessed, and regardless of the shape of the curve used, this approach to assessment compares students to find the "average" students and the "below" and "above" average students.

Norm-referenced tests are correctly used when the primary purpose of measurement is to establish the relative standing of the person being tested. A common example of this in practice is the quite regular and systematic administration of academic achievement tests. In most such situations the purpose is not to assess individual student attainment of specified curriculum objectives; rather, the results permit reliable ordering of students in a class or school. The result is a distribution where a few students do very well, a few do quite poorly, and a majority cluster around the average.

There are several objections to the use of norm referenced assessment in CBCE. Although there are multiple uses of

assessment within the context of CBCE, the fundamental purpose is to determine whether or not the individual student trainee has attained some prescribed degree of competence on an instructional performance task (Hambleton and Novick, 1973). The question of precise achievement levels relative to the achievement levels of others is not central to the purpose of assessment under this instructional model. Rather, assessment information is used to evaluate student performance relative to a predetermined standard (e.g., mastery of an instructional objective covered in a test) in order that the individual might appropriately locate himself/herself on future instructional alternates (Glaser and Nitko, 1971). It follows that local and national norms are thought to be of very limited value. What's important under this model is that each student attain a minimally acceptable level of mastery in each achievement or competency domain.

Under *criterion referenced assessment*, one person's performance is not compared with other persons. Consequently, no person is ever at the bottom or at the top of distribution, because performance is not distributed over a range. The range is restricted to a "yes" or "no" kind of thing. Thus, in competency-based programs, it is useless to talk about a student being in the upper 10 percent of all counselors-in-training. Either the student reached the pre-determined criterion level, or he did not.

Criterion-referenced tests are correctly used when the purpose is to "provide information as to the degree of competency obtained by a particular student which is independent of reference to the performance of others" (Glaser, 1965). Criterion referencing permits the individual learner to determine where he is in relation to his goals without reference to where he stands in relation to other members of the group to which he is categorized. Under criterion referencing, the resultant distribution is skewed positively, i.e., most of the test scores will cluster in the upper regions.

Assessment Dimensions

There are a number of dimensions on which criterion referenced assessment must be considered within a competency-

based model. In this paper we describe five dimensions. The first dimension is the *Criterion Classification* dimension. This dimension relates to the fact that criteria referenced performance and/or criteria referenced competencies may be classified according to the type of criteria that are applied in determining the level of performance or in determining whether the competency has been achieved. Cognitive, performance, affective, and consequence criteria are defined briefly and illustrated in Figure 2 below.

a) *Cognitive* criteria which focus upon the awareness, knowledge, and understanding that is demonstrated.

b) *Performance* criteria which focus upon actions performed which are directly observable.

c) *Affective* criteria which focus upon the probability that cognitive and performance competencies will be used in particular ways.

d) *Consequence* criteria which focus upon changes in other which the counselor should be able to accomplish.

Focus for Criterion-Referenced Objectives

Criterion Classification	Focus for Assessment
Cognitive-Based Objectives	It's what the person knows and/or the amount of information or data which he possesses that counts.
Affective-Based Objectives	It's how the person feels about something that counts. It's the probability that a person will perform in a particular way that counts. It's what the person would like to do that counts.
Performance-Based Objectives	It's how the person performs that counts. It's what the person does with what he knows that counts.
Consequence-Based Objectives	It's helpee welfare that counts. It's what the helpee knows, how he feels, or what he can do as a result of the helper's efforts that counts.

Figure 2 Assessment focus for criterion referenced assessment.

The second dimension is the *Performance Assessment Context*. Here, consideration must be given to the fidelity of the stimulus context under which the assessment occurs. In our model we view the fidelity continuum ranging from "symbolic" at one end and "real" at the other end with "simulated" somewhere in between (Turner, 1974). Under a symbolic context performance is considered to represent the real thing by reason of its relationships (e.g., its symbolic relationship to an item of reality such as a printed "direct quotation.") In counselor training, symbolic stimulus material is generally printed material (e.g., a counselor-client interview typescript). An example of a symbolic assessment context would be the presentation to counselors in training of a typescript of a counseling interview with directions to formulate single sentence statements which accurately reflect the feeling tone of a series of verbal, client statements. Using the same example and task, the stimulus context can be changed to a simulated one simply by presenting the stimulus material by means of an audio or video tape. To qualify as a real context, of course, the stimulus situation would have to include the interactive presence of the counselor trainee and a client.

We recognize, of course, that it's not always easy to draw the line between contexts. For example, Turner (1974), in discussing the stimulus dimension, points to the fact that symbolic or printed stimulus materials often provide the trainee more time to process and respond—there's a permanent record, so to speak, which allows the trainee to study the stimulus materials, go back over it, and so on. It's a very different stimulus situation from viewing the material on video or film where the time is real, assuming of course, that there is only one showing prior to the trainee response. Realness of time, then, enhances fidelity. By the same token, several showings of a video stimulus would lessen the fidelity of simulated stimulus materials. These are important considerations for, as Turner points out, the level of skill required to simulate a context with video where the trainee is dealing with a very rapid response is considerably more than the skill required in symbolic material, especially where time is not real.

The third dimension centers on the question of "who" makes the judgment regarding the level of performance and/or mastery. We refer to this as the *Credentialing Agent* dimension. Our model considers four "agent" levels: Self or the counselor trainee in the case of CBCE; Colleague or counselor trainee peer in the case of CBCE; Expert or Higher Authority; and Consumer or client in the case of CBCE. The interactions of the three dimensions considered thus far are illustrated in Figure 3.

Criterion Classification

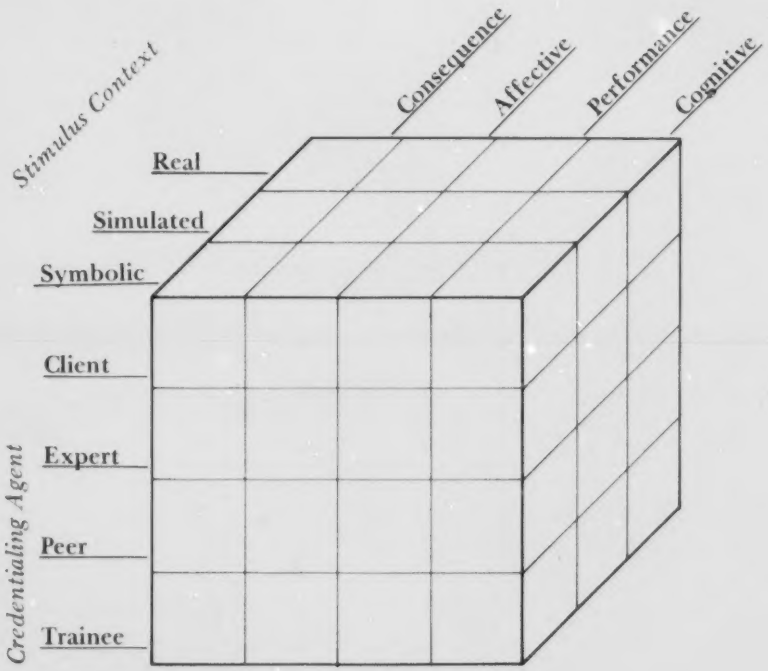

Figure 3 Criterion classification, credentialing agent and stimulus context in performance assessment.

To be sure, there is something to be said for each type of credentialing agent. For each, there are seeming advantages and disadvantages in their usage. Future research, we hope, will eventually establish the conditions under which one type of credentialing agent is preferred to the others. In the meantime, our experience suggests the use of more than one type of credentialing agent (e.g., expert and trainee). It may be that the best we can hope for at the present is high agreement across levels or types of credentialing agents and where this agreement does not obtain, we then at least have a point from which to arbitrate and/or negotiate.

The fourth facet in our model, the *Level of Training* facet, needs little explanation. It simply refers to the sequencing of credentialing activities. In our model, four levels are considered: a) entry level—beginning level; b) pre-practicum—assessment prior to any performance under "real" conditions in a laboratory setting; c) practicum—assessment while working under real conditions but under supervision; d) in-service—assessment in the field while working under self-supervision.

There is a fifth facet that should not escape the attention of persons who seek to credential professionals on the basis of client outcome which might be attributable to counselor trainee directed intervention. For our purposes here, we will refer to this as the *Effects* dimension. To understand this facet, it might be helpful to refer back to the interaction of the bottom row (consequence-based objectives) and the right hand column (focus for assessment) illustrated in Figure 2. As indicated in that cell, the effects of an intervention on the client may be observed as a cognitive, affective, performance, or consequence type and observed in a variety of contexts by various agents. On any one dimension, then, we might expect some client change (e.g., having more information to make a decision or cognitive change; being more assertive in a performance situation; feeling differently about something; being successful in helping someone else solve a problem or realize a goal). But in addition to the expected or predicted results of counselor trainee intervention, we should anticipate some

positive and possibly some negative residual, i.e., consequences of intervention not predicted, but considered desirable and undesirable, respectively. We're not sure just how to deal with these possibilities, but do believe that they must be considered and dealt with openly.

A Closing Caution

Anyone who has attempted to evaluate counselor performance in an interviewing or counseling situation is likely to have discovered the considerable influence of the interviewee or client upon judged counselor performance or effectiveness. In no few respects, the client actually controls counselor opportunity to demonstrate competence. A good example is the interview differences in counselor opportunity to use a particular counseling lead such as "reflection of feeling." In one interview the opportunity may be almost continuous; in another, opportunities may be few and far between. The situation may be likened to a baserating situation in a classroom where the target behavior of interest is "Charlie's tripping other children." To learn that Charlie had seven trips on Monday, three on Tuesday and five on Wednesday means little unless we can assume that his "opportunity to trip" was constant across the three days. If opportunity was constant, then clearly Monday was a "bad day." However, let's assume that on Monday a total of 21 children walked by Charlie's desk within tripping distance. At that figure, Charlie is tripping someone every "one-out-of-three opportunities." Assume further that on Tuesday, because of the nature of the Tuesday curriculum, only three children walked by Charlie's desk within tripping distance. In that situation, Charlie is tripping at every opportunity. Clearly, relative to opportunity, Tuesday was not the better of the two days with respect to Charlie's tripping.

So be it with the counseling interview and any other real performance context where a second party is in the position of introducing variance. Some measure of client controlled opportunity must be taken if the same standard of assessment is to be used across counselors in training. The use of a derived measure of frequency or duration such as percentage or rate are suggested measurement procedures for adjusting the raw

data. Ideally, of course, holding opportunity constant across counselors is the preferred procedure. The use of coached clients would permit the greatest control and should be considered in any systematic assessment/credentialing program.

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Development, Implementation, and Evaluation of a Competency-Based Learning Resources Center

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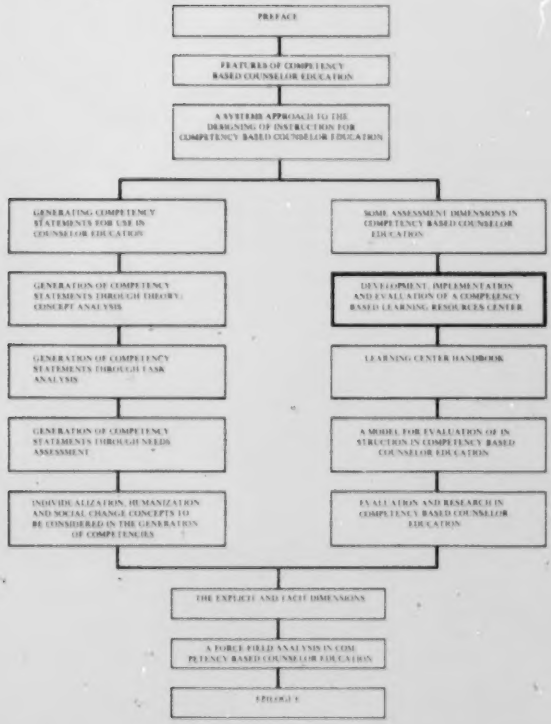
PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY: CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF IN STRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
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The concept of the competency-based learning resources center was originally introduced by Phil Lauver and Tom Froehle through their Counseling Techniques and Laboratory Practice courses (G542 and G537) offered during the 1970-1971 academic year. During its first year of operation, the "learning resources lab" consisted of three individual study carrels, two audio tape recorders with head sets, about two dozen instructional demonstration tapes (audio), several paper-pencil skill development packages, several files of duplicated "handout materials" and a small library of books. Both hardware and software components were housed in a reception-study area just outside the adjoining offices of the two sponsoring faculty.

As the satellite training project moved increasingly in the direction of competency-based learning and criterion referenced instruction, the need for alternative instructional resources became more apparent and placed ever new demands upon this soon-to-be outgrown and outdated "learning resources lab." Recognizing this need, a proposal* was drafted which sought support in the amount of fiteen thousand dollars to expand the lab into a CBL center which could function as a vital support agency to a growing number of CBL oriented faculty and student body. In that proposal, the Center was described as a vital component in providing "optimal patterns of resource support for the development and implementation of CBL" (Devault, Joyce and Gollaway, 1973).† More specifically, it was designed to provide the following services:

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*Froehle, Thomas C. *Resource support for the further development and implementation of a competency-based counselor education program at Indiana University*. Proposal submitted to and fully funded by the Midwest Center for the Development of Urban Pupil Personnel Services, Indiana University, 1974.

†Devault, M. V., Joyce, B., Gollaway, M. A. *Organizing Resources for the Support of Competency-Based Teacher Education*. Teacher Corp., Office of Education, 1973.

1. A retrieval, storage, and display area for the multitude of duplicated or otherwise printed materials which faculty use or prescribe in instruction and supervision.
2. A clearinghouse for the collection and distribution of advertisements which describe various instructional materials.
3. A collection, processing, and storage station for information which relates to: (a) the processing of students through the CBL program and (b) the evaluation of the CBL instructional enterprise.
4. An individual and small group "self-instructional center" where students can engage in programmed learning, audio and/or video tape based instructional alternatives, and other modes of mediated instruction.

Through the grant monies received, along with inside support, a variety of materials were purchased and/or reproduced and management personnel (students) financed. With respect to the acquisition of materials, we realized from the outset that if the retrieval, storage, and display of duplicated materials function was to impact-both faculty and students on a departmental scale, then it was imperative that faculty and students be involved 1) in determining what to retrieve, and 2) as contributors to the stockpile of instructional materials. We realized further, that if faculty unfamiliar with certain of these mateials were to discover them as potentially useful to them, cross referenced inventories and brief abstracts would be required. And lastly, if the CBL Resources Center was to function as the principal place were all mediated instruction was to take place, then it was critical that software such as video and audio taped demonstration, faculty handouts, programmed workbooks, etc. used by faculty and students be available at the Center and that these materials be inventoried and displayed in such a way that efficient access by faculty and students would be assured.

Through the dedicated efforts of the student directors of the Center, along with the hourly help of a host of "work-study" graduate students in the Counseling and Guidance Department, much of the conceptual design became a reality.

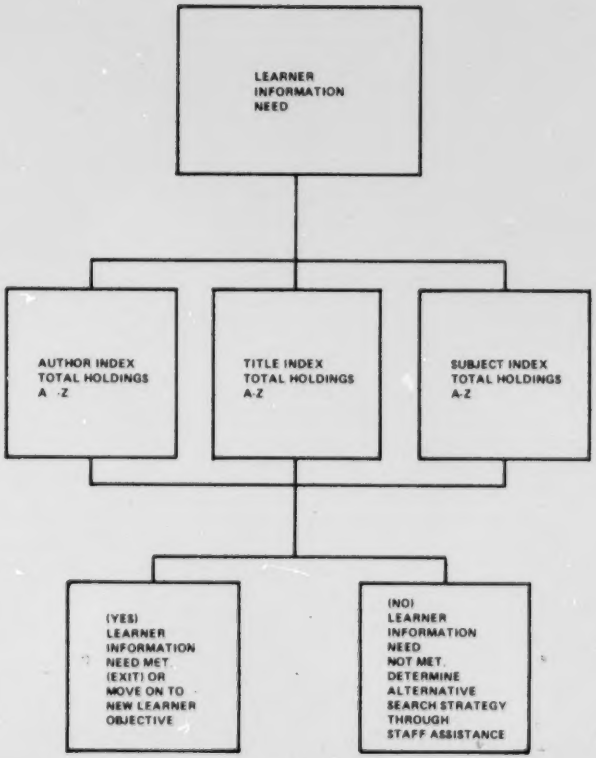
Competency-Based Learning Resources Center Brochure

A brochure was developed to communicate to counselor trainees and faculty the role and function of the center. In the pages which follow we reproduce portions of that brochure.

The Competency-Based Learning Resources Center's primary mission is the efficient delivery of learning materials and instructional software relevant to, and useful in, the development and training of counselors. The materials, staff, equipment, and all resources are directed toward helping the user advance his or her learning and expertise.

The Center operates on the competency-based learning principle that different trainees with different goals may require varying instructional media and time-lines to attain their goals. The role of the Center, then, is to move information to trainees as they need it and in the form most usable at that stage of development. In order to accomplish this, the Center maintains an efficient storage and retrieval system which will continue to be expanded and updated to meet the growing learning needs of its widely varying users.

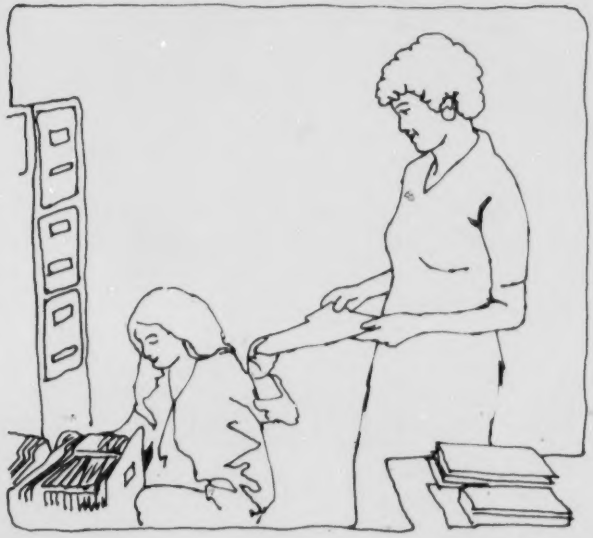
CBL Resources Center
Department of Counseling and Guidance
Henry Lester Smith Center for Research in Education
2805 East Tenth Street
Bloomington, Indiana 47401


LEARNER INFORMATION NEED
AUTHOR INDEX TOTAL HOLDINGS A -Z
TITLE INDEX TOTAL HOLDINGS A-Z
SUBJECT INDEX TOTAL HOLDINGS A-Z
(YES) LEARNER INFORMATION NEED MET (EXIT) OR MOVE ON TO NEW LEARNER OBJECTIVE
(NO) LEARNER INFORMATION NEED NOT MET. DETERMINE ALTERNATIVE SEARCH STRATEGY THROUGH STAFF ASSISTANCE

Handout Materials

Handouts are selectively chosen reproduced materials that have been referred to the Resources Center for distribution or for check-out, when the number of copies is limited. These may be articles from journals, course outlines and worksheets, student monographs, annotated bibliographies, research reports, or other scholarly reports.

The Center makes this type of material available to students and faculty mainly for background information and additional resources. For example, the materials are useful to students for obtaining citations from authorities when writing papers and reports. To faculty, such material has potential value as an aid to course design and lecture preparation and is particularly useful as another means of making unpublished information and individualized assignments accessible to students. Perhaps the greatest value of distributing handouts from a central source is the fact that students and faculty are thereby encouraged to exchange and share their insights, research findings, and classroom methods.



Games and Simulations

Games and simulations are tools which help bridge the gap between theory and practice. Too often college students, when limited to lecture hall experience, lack the means with which to apply classroom theory.

Games and simulations provide the technology for reproducing actual counseling situations that the student might not otherwise encounter in daily student life. Thus, they allow the learner to experience today what he may have to *apply* tomorrow.

Through the use of games and simulations available in the Resources Center, a learner could, for example, vicariously experience a typical racial conflict or some other minority identity phenomenon. The learner could also, using this equipment, experience the application of a particular counseling theory and its possible outcomes. Other counseling skills, such as those involved in setting up workshops and human relations training groups, can be more easily acquired through the use of games and simulations.

Audio-Visual Tapes

Tape-based resources in the CBL Resources Center are primarily of use to counselors in training as an instructional alternative toward the achievement of performance objectives. An A-V tape, alone, can be used, but the use of printed and nonprinted material combined in an instructional package has proven to be most effective.

The video and audio tape bank now available in the Resources Center is designed to meet a number of observed needs. Some of the tapes in the present bank contain: examples of "schools" of counseling, the techniques they employ, and the important individuals active in that school; dialogues on classic textbook cases; and examples of counselor education faculty in action, reflecting their orientation and techniques. The bank serves an equally important function in providing the counselor-in-training with an experientially-based overview of the present state of the field.

Books and Journals

The Resources Center offers a collection of books and journals selected for their potential usefulness to students and faculty. Some examples of topics include: counseling theories, vocational theories, and psychological testing.

These materials serve the most basic needs of students and faculty engaged in research. Students usually introduce themselves to a topic by surveying the printed literature available on that topic. References and bibliographies, then, guide them to journals and other sources for further examination. Books and journals also provide supplements and alternatives to lecture material. Moreover, new and practical counseling techniques tend to appear first in journals, traditionally recognized as indispensable tools to students. The Resources Center, as a service to faculty and students, provides easy access to these materials.

Process Evaluation

To ensure systematic trial and evaluation of the idea and the more specific operating procedures of the CBL Resources Center, a process evaluation model was developed* and is included here in the several pages which follow. Although the model has since been used as a guide for data collection, and feedback, the results of a comprehensive two-year evaluation are not yet available. However, a summative evaluation is currently underway which will describe the project's status two years after its opening. The evaluation is being conducted almost in total by personnel from the Department of Library Science, and copies will be shared as they become available.

*This model for process evaluation was put together by Barbara Edwards, a project assistant from the Department of Instructional Systems Technology. It draws heavily from different sources in the area of diffusion and adoption, particularly from the work of Stuffelbeam, Guba, and Bhola.

PROCESS EVALUATION BASED ON CRITERIA FOR DIFFUSION STAGE

Function	Disseminate (Create Awareness)	Demonstrate (Build Conviction)	Trial (Build Familiarity and Basis for Assessing)
FUNCTION I Is the CBL Resources Center functioning as a retrieval, storage and display area for the multitude of duplicated or otherwise printed materials which faculty use or prescribe in instruction and supervision?	a) *Intelligibility:* Is all information clear regarding the CBL Resources Center as a retrieval, storage and display area for duplicated and printed materials used by faculty or prescribed in instruction and supervision? b) *Fidelity*: Does the above information present a valid picture of this function of the CBL Resources Center? c) *Pervasiveness*: Has the information regarding the above function reached all of the intended audiences? d) *Impact*: Has the above information affected key targets appropriately, i.e., to the degree that it should?	a) *Credibility:* Are the operating qualities of the CBL Resources Center sufficiently credible to build conviction regarding its function as retrieval, storage and display area for printed materials? b) *Convenience*: Are the operating qualities of the CBL Resources Center sufficiently convenient to build conviction regarding its above function? c) *Evidential Assessment*: Are the operating qualities of the CBL Resources Center providing sufficient opportunity for professional assessment of evidence, both positive and negative, concerning the function of the invention being demonstrated (i.e., as retrieval, storage and display area for printed instructional materials)?	a) *Adaptability:* Is the CBL Resources Center's functioning as a retrieval, storage and display area for duplicated and printed materials which faculty use or prescribe in instruction and supervision being fit to the trial setting if this function is adaptable to the setting? b) *Feasibility*: Is the function of the CBL Resources Center referred to above operationally possible in the trial setting? c) *Action*: Is performance of the function referred to above being carried through in the trial setting?

FUNCTION II

Is the CBL Resources Center functioning as a clearinghouse for the collection and distribution of advertisements which describe various instructional materials?

a) *Intelligibility*:
Is all information clear regarding the CBL Resources Center as a clearinghouse for the collection and distribution of ads which describe various instructional materials?

b) *Fidelity*:
Does the above information present a valid picture of this function of the CBL Resources Center?

c) *Pervasiveness*:
Has the information regarding the above function reached all of the intended audiences?

d) *Impact*:
Has the above information affected key targets appropriately, i.e., to the degree that it should?

a) *Credibility:*
Are the operating qualities of the CBL Resources Center sufficiently credible to build conviction regarding its function as a clearinghouse for the collection and distribution of ads which describe various instructional materials?

b) *Convenience*:
Are the operating qualities of the CBL Resources Center sufficiently convenient to build conviction regarding its above function?

c) *Evidential Assessment*:
Are the operating qualities of the CBL Resources Center providing sufficient opportunity for professional assessment of evidence, both negative and positive, concerning its function as a clearinghouse for the collection and distribution of ads which describe various instructional materials?

a) *Adaptability*:
Is the CBL Resources Center's functioning as a clearinghouse for the collection and distribution of ads which describe various instructional materials being fit to the trial setting if this function is adaptable to the setting?

b) *Feasibility*:
Is the function of the CBL Resources Center referred to above operationally possible in the trial setting?

c) *Action*:
Is performance of the function referred to above being carried through in the trial setting?

PROCESS EVALUATION BASED ON CRITERIA FOR DIFFUSION STAGE

Function	Disseminate (Create Awareness)	Demonstrate (Build Conviction)	Trial (Build Familiarity and Basis for Assessing)
FUNCTION III Is the CBL Resources Center functioning as an individual and small group "self-instructional center" where students can engage in programmed learning, audio and/or video tape based instructional alternatives, and other modes of mediated instruction?	a) *Intelligibility*: Is all information clear regarding the CBL Resources Center's function as an individual and small group "self-instructional center" where students can engage in programmed learning, audio and/or video tape based instructional alternatives, and other modes of mediated instruction? b) *Fidelity*: Does the above information present a valid picture of this function of the CBL Resources Center? c) *Pervasiveness*: Has the information regarding the above function reached all of the intended audiences? d) *Impact*: Has the above information affected key targets appropriately, i.e., to the extent that it should?	a) *Credibility*: Are the operating qualities of the CBL Resources Center sufficiently credible to build conviction regarding its function as a collection, processing and storage station for information relating to 1) the processing of students through the CBL program, and to 2) the evaluation of the CBL instructional enterprise? b) *Convenience*: Are the operating qualities of the CBL Resources Center sufficiently convenient to build conviction regarding its above function? c) *Evidential Assessment*: Are the operating qualities of the CBL Resources Center providing sufficient opportunity for professional assessment of evidence, both negative and positive, concerning its above function?	a) *Adaptability*: Is the CBL Resource Center's functioning as a collection, processing and storage station for information which relates to 1) the processing of students through the CBL program, and to 2) the evaluation of the CBL instructional enterprise being fit to the trial setting if this function is adaptable to the setting? b) *Feasibility*: Is the function of the CBL Resources Center referred to above operationally possible in the trial setting? c) *Action*: Is performance of the function referred to above being carried through in the trial setting?

FUNCTION IV

Is the CBL Resources Center prepared to function as a collection, processing and storage station for information which relates to 1) the processing of students through the CBL program, and to 2) the evaluation of the CBL instructional enterprise?

a) *Intelligibility*:

Is all of the information clear regarding the CBL Resources Center as a collection, processing, and storage station for information which relates to 1) the processing of students through the CBL program, and to 2) the evaluation of the CBL instructional enterprise?

b) *Fidelity*:

Does the above information present a valid picture of this function of the CBL Resources Center?

c) *Pervasiveness*:

Has the information regarding the above function reached all of the intended audiences?

d) *Impact*:

Has the above information affected key targets appropriately, i.e., to the extent that it should?

a) *Credibility*:

Are the operating qualities of the CBL Resources Center sufficiently credible to build conviction regarding its function as an individual and small group "self-instructional center" where students can engage in programmed learning, audio and/or video tape based instructional alternatives, and other modes of mediated instruction?

b) *Convenience*:

Are the operating qualities of the CBL Resources Center sufficiently convenient to build conviction regarding its above function?

c) *Evidential Assessment*:

Are the operating qualities of the CBL Resources Center providing sufficient opportunity for professional assessment of evidence, both negative and positive, concerning its function as an individual and small group "self-instructional center" where students can engage in programmed learning, audio and/or video tape based instructional alternatives, and other modes of mediated instruction?

a) *Adaptability*:

Is the CBL Resources Center's functioning as an individual and small group "self-instructional center" where students can engage in programmed learning, audio and/or video tape based instructional alternatives, and other modes of mediated instruction being fit to the trial setting if this function is adaptable to the setting?

b) *Feasibility*:

Is the function of the CBL Resources Center referred to above operationally possible in the trial setting?

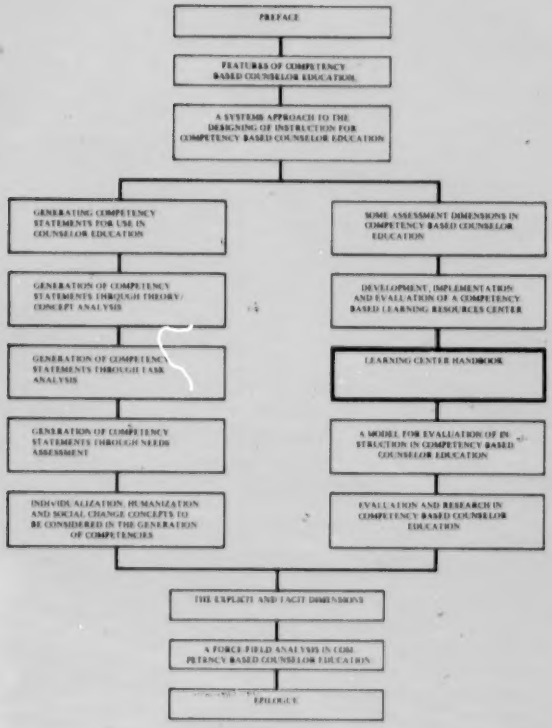
c) *Action*:

Is performance of the function referred to above being carried through in the trial setting?

Learning Center Handbook

J. Craig Brubaker

Peg Childs


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Prepared by
Craig Brubaker/Peg Childs

The Competency-Based Learning Resources Center
Indiana University/Bloomington

Preface

The main purpose of this handbook is to bring together, in a useable format, design techniques which will be helpful in the development of a learning center. This type of aid was not available to us during our developmental phase, so the frustrations which come from poking in the dark have been some of the driving forces in its creation.

Throughout our writing we were constantly guided by the question: What would we have liked to have known when we started? The answers to this question will be found in the following pages. The majority of the people involved in the development of our learning center had minimal background in instructional development. Because of this we have chosen to speak to people whose primary job commitment is outside instructional development, but who have the task of creating a learning center.

This handbook is generated around a specific model of instructional development. We picture development as being a circle with many possible entry points. This allows you to start any place in the developmental process that your needs dictate. Our development process is made up of five components: Direction, Activities, Facilities, Resources, and Evaluation. A section of the handbook has been given to the definition of each of these areas.

Our own experience showed us that the development process needed flexibility, but throughout this period of flexibility, the major structure which always remained constant was our overall goal—development of personalized learning. With these ideas as background, we present a handbook whose appropriate use can only be determined by you.

Introduction

. . .Once upon a time there was a learning, materials resource, mediated learning, learning resource, instructional materials, instructional learning, educational materials, competency-based learning materials resource CENTER. . . .

Rationale

No matter what they are called—and learning centers have been called many things during their short history—learning centers exist so that individuals can take charge of much of their own education independent of an instructor, a lecture, and a classroom.

The theories behind all learning centers are fundamentally the same: the centers should enable people to become self-directed learners, and toward this goal, must offer center users the choice of various instructional alternatives, utilizing as many media packages as possible. Most important, however, is that the mere existence of a fine structure and a multitude of materials does not necessitate more or better learning. It is essential that a learning center have a purpose and be established with that purpose in mind.

There can be any number of justifiable reasons for creating a learning center, for example, to introduce new information or learning, or to reinforce previous instruction or learning. Extending, stimulating, and enriching individual interests is also important, as is obtaining data concerning progress in specific skill building tasks. Whatever the purpose, it is not enough to merely create a learning center because it is in vogue.

Hence, the type and scope of all learning centers is determined by the overall purpose, space, monies, user needs, and materials on hand. A learning center can range from one room with several activity stations, to a complex combination of library and audio visual services, well planned and highly financed.

History

The learning center personalization ideology seems to have come about mainly through the development of technology. A

brief look at the ancient past will reveal, however, that the concept of individualized instruction is not new, nor was it heralded on the wings of a video tape recorder in these United States. But whatever the historical foundations, technology did offer the means to employ individualized instructional theories, and provided the learner and instructor with an interesting way to increase self-learning.

While many libraries still exist as typically linear, print oriented bulwarks, a great many more are looking at proof of what well planned for and intelligently utilized technology can do to enhance learning and abilities. It is because of recent observations and evaluations of the strengths and weaknesses of existing facilities, that modern libraries and audio visual centers are beginning to merge and become instructional materials centers (IMCs). While neither strictly print nor totally non-print is perfect by itself, the combination of the two opens unlimited opportunities to explore new visions in learning and instruction.*

Colleges and Universities

Just as an elementary school may organize learning centers in a single classroom, college and university departments are finding that sometimes the library simply does not offer the extended, personalized services that learners need. It is for this reason that many departments have taken it upon themselves to set up learning centers, independent of the university's major library system, to meet specific departmental needs. Individuals are able to find a small niche in a large college where they have easy access to materials dealing with specific disciplines. Instructors find departmental learning centers functional because they have the opportunity to individualize instruction, and utilize all services the center can offer.

At any educational level, the initial approach to a learning center should consider several fundamental points. To begin with, it is essential to approach a learning center discussion with an open mind and with as few as possible preconceived

*For a more extensive discussion see Appendix A (History of the Development of Learning Centers).

ideas about what it should BE, but with a definite idea of what it should DO. It must be remembered that a learning center needs to constantly change to meet the needs of users and curriculum goals, and should, therefore, be flexible and able to function for a variety of uses. Also, from the very beginning, all potential users should be involved in the planning stages of the learning center. It is for these people that the center exists, and without these people as support groups the traditional library would probably be as effective.

For ease of identification, it might be worthwhile to view the concept of a learning center within a three part framework:

Facilities—areas defined by function and designed for personalized learning.

Resources—print and nonprint media available to enable users to complete learning activities.

Activities—opportunities for personalized learning experiences within the framework of learning center's resources and facilities.

It is with these characteristics in mind that this manual will look at how to arrive at a final product—a learning center suited to the situation and needs of YOUR learners, whether they come in Large Groups, Small Groups, or as Independent Learners.

Direction
Direction
Direction
Direction

DIRECTION

The purpose of this section of the manual is to offer some procedures which will help to determine the direction of your development. The path of your development can be determined by proceeding through three processes:

Define	1)	Define the present educational system.
Describe	2)	Describe the decision maker's priorities in the three characteristics of a learning center.
Decide	3)	Decide on the immediate direction of the development.

Define

The Present Educational System

Any group with the purpose of establishing an educational program can be thought of as an educational system, a collection of subgroups with specific functions who, through their interactions, reach the larger system goal—education. A helpful tool for enabling a group to look at their own educational system is a graphic model which represents possible subgroups and their relationship to each other. A characteristic of all models is that they are second rate. That is, they do not and cannot represent all of the possibilities of the real situation. But models can be a very useful way of taking a number of fuzzy thoughts about a particular setting and putting them in better focus. The following steps are presented for this purpose. Read through them and take some time to develop a model of YOUR system.

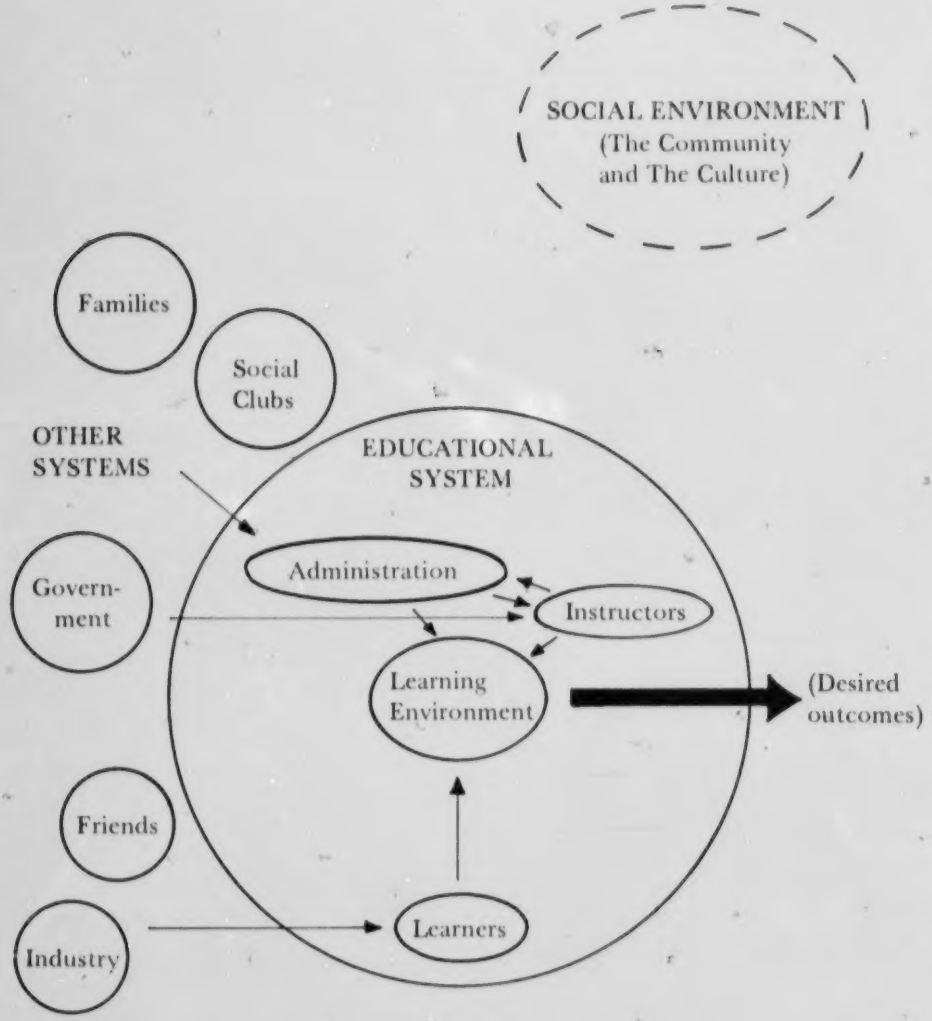

SOCIAL ENVIRONMENT
(The Community
and The Culture)
Families
Social
Clubs
OTHER
SYSTEMS
EDUCATIONAL
SYSTEM
Govern-
ment
Administration
Instructors
Learning
Environment
(Desired
outcomes)
Friends
Industry
Learners

Figure 1

Development of an Educational System Model

1) Take a look at the model presented in figure 1. It presents some of the general structures existent in many educational systems.

2) In order to design a personalized model some questions in regard to the general model (fig. 1) need to be answered. The answers to these questions will redesign the model to better fit your specific situation:

   a) Toward what purpose is the system going to be working?

   b) What are all of the possible subgroups in the system which will have a say in the development?

   c) What variables will influence the decisions of each of the subgroups?

   d) Put a "C" by each variable that can be changed and a "UC" by the variables which are unchangeable.

   e) Are there any duplications? If so, cross them out.

   f) Can parts of the list be combined under larger headings which can be labels for structures in the model?

   g) Which of these structures make up the central core of the system and which are peripheral?

   h) What is the relationship between these structures?

Describe

The Priorities

Now that the educational system is better defined, it is time to look at what it has to say about a learning center. Three charts were developed to aid in this venture (Appendices B, C, D).

Appendices B, C, and D are checklists to assist in information gathering. Once completed they will contribute three types of information needed to make decisions about the direction of your development.

Type I – What do the major decision making bodies want?

Type II –What is presently available?

Type III –What are the developer's interests?

Type I Decision Makers

For the goal of individualized instruction to be obtained, the major decision makers in the educational system must take part in determining the direction of the development. Look at your model of the educational system and identify the structures which represent decision making bodies. Go to the checklists in the back of the book and label the boxes marked decision makers.

From these checklists several survey methods could be generated. However, for the present purposes the interview seems to be the quickest and most informal means of effectively gathering the needed information.

An interview is not just a time to sit down and chat. In order to obtain all of the pertinent information a certain amount of structure is necessary. The following points are ideas to keep in mind while preparing for the interviews.

Interview Ideas

1) Decide upon a goal for the interview.
2) Be familiar with the person to be interviewed.
3) Set a time for the interview–don't just drop in.
4) Conduct the interview in a private setting.

5) Practice looking at the presentation from the other person's point of view. Is the presentation easy to understand?

6) Be aware of your personal prejudices and try to keep them out of the way.

7) Make sure the persons being interviewed will give an accurate picture of the entire part of the educational system which they represent.

The checklists presented in the appendix only point to general areas of information needed for decision-making. In order for effective decisions to be made, each of these points must be dissected into its pertinent areas. The following are six types of questions which might be of assistance in this operation.

Types of Questions (Fig. B)

1) Asking for definitions.

2) Asking for examples.

3) Asking for rules, reasons, arguments.

4) Asking for a rating.

5) Asking for opinions.

6) Asking for justification for the above answers.

Type II Present State

The second major factor which will help determine the direction of your development is the present state of the learning environment. It is from this present state that your development must begin. On the far left hand side of the interview forms is a column labeled "present state." Take a look at the learning environment and find out what items are already part of your educational system, and place a check in the appropriate boxes. If there is some uncertainty about any characteristic try to find someone who is familiar with the area.

Type III Developer

The final type of information, and in many cases the most important, is the interests of the developer of the learning

center.* First the developer needs to look broadly at the many possible factors which may have an effect on the center's output. Listed here are some of the prominent factors, but there may be others which are peculiar to your specific situation and should be added.

Factors Influencing Instructional Developers

1) Personal commitment
2) Planning skills
3) Production and evaluation skills
4) Materials and facilities
5) Availability of specialized help
6) Availability of additional training
7) Released time
8) Hours available for development
9) Administrative support
10) Knowledge about facilities, resources, and activities

After looking at these factors and any added ones, many questions are brought to mind about the developer's interest in creating a learning center. It is important that each developer give some straight answers to these questions. With these answers in mind have each developer take the checklists and begin marking the areas in which they are interested.

Decide

The Direction of Development

All of the information needed to define and understand the objectives is now available, and some decision-making steps can be pursued. But how is this information utilized? "What do I do next?" There is no one answer, but provided here are a few suggestions. It will also be necessary to use your personal creativity to juggle the information until some specific statements can be made about the center's direction.

*The developer is the person or persons responsible for the creation and sometimes operation of the learning center. It is this person who also develops the resources and facilities, and many times manages the day-to-day activities of the center.

First, tally the number of marks given to each item listed on the interview forms. This is done by counting across the page and recording the sum of all the marks in the last column marked "tally." The items can then be ranked on a separate sheet of paper according to the number of marks each item received. It is also possible to tally the work by the type of information each item represents. What are the interests of each decision maker? What is the present state of the learning environment? How did each developer mark his check sheet? What are some additional ways this information could be used? What questions are still left unanswered, and how could the information be used to develop the answers?

All of this information needs to be used in answering these two major questions:

1) In which area or areas should initial development take place (Facilities, Resources, Activities)?

2) What goals are sought in each area?

The answers to these questions will help put these structures into perspective.

Direction Activities Facilities Resources Evaluation

ACTIVITIES

Student activities have been defined as opportunities for personalized learning experiences which should be made available through the learning center. Personalized learning, however, does not just happen, it is consciously planned by educators who wish users to progress from authoritarian to independent instruction. Because it is difficult for some users to move in the direction of personalized learning, certain activities can be implemented to assure progressive development toward that goal. Some of the activities that are linked to the learning center environment are minicourses, games/simulations usage, computer-based learning, computer-based test taking, and programmed learning. Group discussions, tutorials, role-playing, case studies, and brainstorming are best served in the learning center by availability of space, facilities, and an environment that encourages large and small group interaction as a means to personalized learning.

Minicourses

These courses are sequences of learning that are of short duration and usually contain only a few participants. The learning center should be of particular help by offering space and AV set ups to record sessions that users can observe over again. Entire minicourses can be placed in single or multimedia formats for independent study enrichment.

Games/Simulations Usage

Games/simulations include instructional formats that can be utilized singly or in groups, depending upon the goal or objective of the educational situation. Games usually involve prespecified criterion and rules, while simulations explore various aspects of reality.

Computer-Based Learning

Computer-based education and information retrieval systems can help to point out problems in instructional programs and assist in developing highly individualized educational modes. Computer-based education situations also serve users as quick and accurate retrieval systems and can improve user abilities

to assess, manipulate, categorize, and interpret data when used on a one-to-one basis.

Computer-Based Test Taking

Computer generated tests, answers, and item banks allow users to take pretests and posttests to determine competency levels and gauge achievement. They can be designed to provide immediate feedback, which in most cases increases the user's learning rate. Item banks can generate an almost unlimited variety of questions.

Programmed Learning

Programmed instruction is usually designed in a self-instructional print format that presents information in frames, requiring the user to recall previously learned information to answer questions, and give supportive, immediate feedback concerning the answer. It is particularly appropriate for independent study.

Group Discussions

Either teacher or student directed, these groups are both large and small. Group discussions can stimulate attitude change and influence behavioral change, besides fostering self-learning and self-correction. Shared experiences lead to individual interpretation. Instructional media in the center can be modified to large, small and individual learning patterns, depending upon the goal or objective.

Tutorials

These may include group, supervised, practical, or mediated AV tutorials. Supervised tutorials must be conducted by a well-informed tutor, and students must be prepared in order for this practice to be effective. For this reason, problem centered group tutorials work best. Tutorials are valid forms of instruction for slow or fast students, and for self-enrichment and study. Computer managed tutorials are increasingly popular in areas that have computer access.

Roleplaying

Roleplaying generally involves comprehension, application, and rehearsal of the cognitive skills that individuals already

possess. Participants act out or pretend to assume the attitudes and feelings of a particular role. A problem is presented in a life-like setting, involving both continuing processes and the individuals themselves. Roleplaying has worked well in all levels of education, from primary school to business training.

Case Studies

Case studies present problems concerning occurences involving other people. The users are asked to project themselves into the case and discuss, analyze, and evaluate it. Case studies have been found to be effective in promoting attitude change because of participants' personal involvement.

Brainstorming

This exercise gives a group of people a problem-solving situation and encourages unique and unusual suggestions. The group then analyzes, synthesizes, and evaluates all ideas, arriving at a practical solution. Similar to group discussions, brainstorming is generally used to draw out the unique approaches to problems.

Facilities
Facilities
Facilities
Facilities

FACILITIES

It is important that the facilities of a learning center support and enhance the resources and activities which it provides. In addition to resources gaining power through good facilities, the equipment will receive more extensive use and users will return more readily to the center. Users will also appreciate facilities that permit task completion in a satisfying manner. When thinking about facility design there are ten major areas that need to be considered:

Circulation

The circulation area should contain displays and exhibits, copying equipment, card catalogs, periodical indexes, and the checkout desk. Most of the reference materials a user needs should be housed here, and this area is also the most functional for instructional activities. Because the major purpose of the circulation area is entry into the system it should be placed near the main entrance of the facility.

Open Access Materials Housing

This area should display the various media which users are allowed to obtain for themselves. It is also a good place to locate general reading and browsing materials. Reserve materials may be kept in this area if they are placed close enough to the circulation area for easy control by the circulation desk.

Listening and Viewing Area

This part of the center must be flexible enough to accommodate large and small groups and independent learners. In most cases this can be taken care of by the use of study carrels, head phones, and multiple head phone jacks. If the center is to be used for large group listening and viewing, this activity area should be put in the most secluded section of the center.

Studying and Learning Area

The studying and learning portion of the center must also be designed to accommodate large group, small group, and individual activities. Different size and shaped study tables can help bring this about. The use of individualized study carrels

are a means for gaining a certain amount of desired seclusion. The carrel area should be a good distance away from the group listening and viewing stations.

Administration Area

This area is reserved for the center director's office space. Any records and equipment needed for the day-to-day operation of the center should also be housed here. It is important that this area have easy access to the other sections of the center and to the rest of the offices and classrooms in the building.

Work Space

This is the area provided for staff and users to produce the materials needed to operate the center and fulfill learning needs. It is the place to bring together all of the production equipment which is probably scattered throughout the building. For efficiency, this area should have easy access to an outside corridor so that workers do not disturb the activities in the rest of the center.

Storage Space

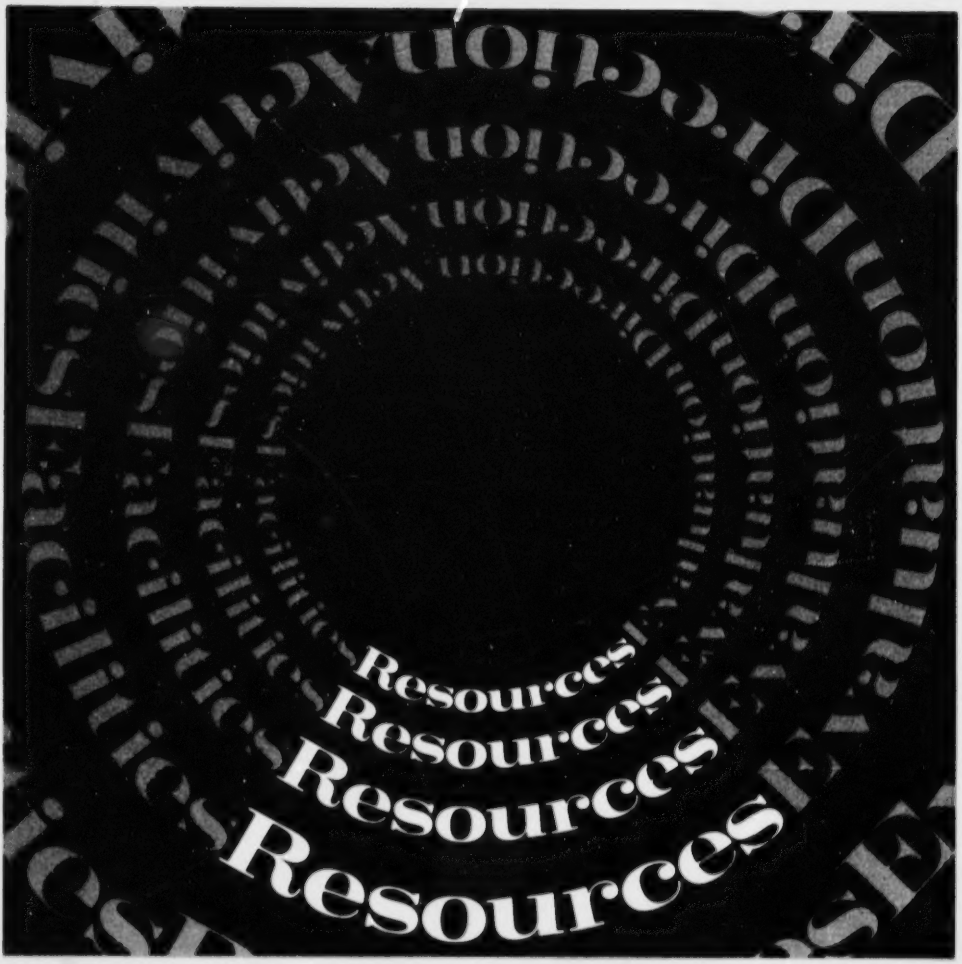
With almost any facility there is a need for space to house items which are used infrequently. A small, out of the way room is an excellent place to keep annual inventories of supplies, seldom-used production equipment, and media which are not in current use.

Professional Collection

The professional collection area has a number of possibilities. It could be used only for storage of material pertinent to the professional staff, or the space might well be enlarged to give the staff an interaction area. The facility might also be designed so that it provides the services of a professional development lounge. In most cases it would be appropriate to position this area close to the work area.

Reserve

If the learning center houses instructional media accessible only through staff personnel, it should be stored in this portion of the facility. The type of storage facilities needed will be totally determined by the particular resources stored, and should be located so that staff members at the circulation desk can easily control its use.


Resources
Resources
Resources
Resources

RESOURCES

Personalized learning is the theoretical goal toward which a learning center endeavors. With the proper resources to encourage independent study, that theoretical goal is on the way to being achieved. To help encourage independent study, as many resources as possible should be decentralized and accessible for easy usage. Learning centers range from those with the very minimal resources and equipment to the well-stocked IMC's, but it is assumed that if a mediated resource is found in the learning center, the appropriate equipment is available to utilize that resource. Following are major resources found in learning centers:

Games/Simulations

In addition to game/simulation usage in individualized learning progression, instructional simulation/games have been becoming more popular because they provide ample opportunities for participation. Problem solving skills are enhanced through the analysis of facts and the realism which games and simulations provide. Areas such as social studies, guidance, vocational courses, and community and social problems lend themselves particularly well to games/simulations. Games/simulations should be easily accessible to all users and displayed and indexed to stimulate interest.

Audio Tapes and Records

Audio tapes include cassette, reel-to-reel, and eight track formats. Audio tape and records are flexible in that they can be used with all size groups. Tapes and records are nearly indispensible in independent study and are produced in all subject areas. Further, audio recordings are integral parts of multimedia packages, and can be stored and displayed within a relatively small amount of space.

Video Tape

Video tape is also flexible in use, storage, display, and capability. It can be used in microteaching situations, to record broadcasts and replay them at more convenient times,

in self-instruction, to record locally prepared educational programs, and perhaps most importantly to record user performance. Initial monetary outlay is great, but tapes can be reused indefinitely and stored easily.

Filmstrips

These are simply a series of related pictures arranged in a permanent sequence. Filmstrips are inexpensive, easy to store and display, and relatively durable. Projection can be as simple for large or small groups as for individual viewing. Some filmstrips are synchronized with cassette tapes or records. Filmstrips can also be faculty and user prepared.

Slides

Much like filmstrips in usage, slides are easier to arrange in a variety of sequences for showing to groups or individuals. Slides can also be prepared by instructors and users, but take up more storage space and can be easily lost. Programs can be bought or made with automatic advance. Programs can be displayed in slide carrels, but younger users might have difficulty if the slides are dropped, spilled, or otherwise out-of-order.

Visual Materials

These include flat pictures, diagrams, graphs, charts, posters, and overhead transparencies—to name a few—these types of instructional materials can be grouped with filmstrips and slides as simple to use, inexpensive visual aids. Visual materials have been proven to enhance learning situations and make conceptual learning quicker and easier, while promoting integration of experiences. Overhead transpariences are more flexible than other pictorial materials because of the ability to use overlays to help multiple-discrimination learning. Visual materials can be prepared quickly by users. Flat visuals can be made accessible to users by placing them in folders, but many visuals require careful storage because of potential damage.

Films

Although films have not been proven to provide significantly better instruction than other forms of media, many users

seem to prefer films as a mode of instruction. Films might be considered less of a bargain because of their initially high cost, but storage and display is not a problem. Some thought might be given to renting films from circulating film libraries as a convenience and service to users. Individual study is enhanced by film availability as is small and large group instruction. Enrichment is also an important aspect of film use.

Multimedia Kits

Multimedia kits are particularly suited to independent and small group study. The kits usually consist of printed materials plus one or more medium. For example, one kit may contain charts, posters, answer and instruction booklets, filmstrips, and records. It should be noted that multimedia kits do not in and of themselves promote learning. They must be used with carefully prepared objectives and goals. Kits may take up extra storage space because of irregular shaped boxes or containers, but in many cases user interest can be stimulated by storing them openly.

Manipulative Materials

This category may include several types of materials, but the distinction is that the materials can be manipulated in some way by users during the learning process. The most common types of manipulative materials are models which can be taken apart, identified, observed, studied, and put together again. Science models are the most common forms. However, also included in manipulative materials are bulletin boards, displays, exhibits, feltboards, flash cards, lettering sets, specimens, and a broad variety of other materials including many of those already mentioned such as some games/simulations. The greatest contribution of these materials is the opportunity to discriminate parts of wholes, sensory-touch rewards, and examination. These objects may not be as easily stored as others, and tend to focus on specific disciplines as opposed to general interest.

Print Materials

Printed materials include all types of text and paperback books plus journals, pamphlets, magazines, printed handouts,

articles, etc. The importance of print in a learning center has been stressed by so many writers it is worth mentioning again only in terms of its importance to the total learning environment. Printed materials, no matter how automated the learning center, are not ancient throwbacks to a traditional library system, but essential tools in the learning process. Included with printed materials are microforms, possibly the easiest stored of all media.

Evaluation Direction Activities Facilities Resources Evaluation Direction Activities Facilities Resources Evaluation Direction Activities Facilities Resources Evaluation Direction Activities Facilities Resources Evaluation Direction Activities Facilities Resources Evaluation Direction Activities Facilities Resources

EVALUATION

Evaluation as it is presented here has the major task of improving the design process of the learning center. The idea of improvement implies change, change which is directed by choices between alternative future directions. Evaluation aids this decision by comparing these alternatives and presenting information about discrepancy between the stated direction and the present position. In order to make this comparison it is necessary to know WHAT kind of information is sought and WHEN the information is gathered. Figure 1 shows the interaction between these two areas and the four types of information they create.

		In Process	After process
When	Outcome Criteria	I. Information concerning the stated *outcomes* Objectives observed *during* the development process	III. Information concerning the stated *outcomes* Objectives observed *after* the initial development process
What	Practicality Criteria	II. Information concerning the *background* Factors observed *during* the development process	IV. Information concerning the *background* Factors observed *after* the initial development process

IN PROCESS – Evaluation during the development phase

AFTER PROCESS – Evaluation after the initial development phase is completed

OUTCOME CRITERIA – Information concerning the stated objectives

PRACTICALITY CRITERIA – Information concerning the background factors (cost, time, convenience, worker satisfaction, etc.)

The following guidelines are some things to keep in mind preceeding and during evaluation.

1. *IN PROCESS* evaluation is many times an informal look at the progress so far.

2. *AFTER PROCESS* evaluation is not concerned with go-stop questions but with what changes need to be made.

3. *OUTCOME* and *PRACTICALITY* criteria must be combined to make evaluation decisions.

   a. If the objective is on target but the money and time commitment are out of line, maybe the objective needs to be re-evaluated.

   b. If the practical criteria are at an appropriate level but adequate progress is not being made toward the objective, it might be helpful to look at the ways the practicality factors are being expended.

4. All four types of information go together to make a whole. They can be used separately to make minor changes in the plan in order to better tune the process, but all four should be considered before major changes are made.

5. All the people in the educational system are evaluators. Develop methods for obtaining and using their information.

6. In order for evaluation to be an effective part of the total design process, the other areas in the process need to be flexible enough to change in the direction posed by the evaluation information.

With these general ideas concerning evaluation in mind, let's take a look at some additional overall considerations.

A new facility, in which there is a specific design or plan for a learning center, is quite different from a learning center that evolves from existing facilities. It is for this reason that the total development of a learning center can

be viewed in terms of a circular process (p. 138). It makes no difference at what point the development is started, by means of the continual evaluation process (that must occur if a center is to serve users and forego becoming static) all development areas interact and become like components in a communication model where there is no stopping point. A learning center may very well develop from a number of resources that no one can figure out what to do with. But once the idea of a learning center is generated, everything that occurs must be evaluated (with the aid of user and staff feedback) and then left as is or redeveloped.

There are a great number of resources to turn to for help in planning a learning center in a new facility, but few informative articles giving clues to the planning of a small resource center in a departmental or a specific-discipline situation. If this is YOUR aim, the following points might be worth considering:

1) *Overall goals*: The staff (and perhaps users) will be much more effective if they are aware of the overall purposes, objectives, and goals of the center. Why the learning center exists is an important thing to know. Further, a set of written objectives and goals will be more helpful than a lecture on the general purpose of a learning center.

2) *Background Information*: If the center is staffed with persons who are unaware of the general purposes and possibilities of learning centers, bibliographies or other information should be made available to the staff, and they should be encouraged to become familiar with this information.

3) *Initial Procedures:* A prepared procedures manual, setting down guidelines for the simple "housekeeping" chores is indispensable. Procedures that seem deceptively simple, such as checkout of materials, can become major stumbling blocks to the successful operation of the center. It should be impressed upon the staff, however, that this procedure information is temporary and everchanging—"everchanging" because it is the staff that makes observations about user needs, and it is the staff that should help update existing procedures. Toward this end, a notebook might be kept handy for

the staff to jot down questions, problems, and suggestions as they think of them. At periodic staff meetings, these notebook entries should be discussed and implemented if the staff agrees that the suggestion is an improvement.

4) *Flexibility*: The large philosophy statement concerning the goals of the learning center is static, but the rest of the system must be flexible to relate to the changes in users' needs. The entire system must be able to give up past developments and past procedures to move on and meet changes in user need.

Conclusion

We hope that in some way this handbook can be of service to you, now or in the future. We feel it presents the type of information which will help you answer the question:

WHERE DO WE GO FROM HERE?

Appendix A

History of the Development of Learning Centers

There can be no really profound discussion of learning centers without at least a nodding acquaintance with the vast amount of written material that has been published. The majority of sources used for this manual stress independent study and individualized instruction as the main ingredients necessary to launch a successful learning center. In addition to extensive bibliographies included in each book, the authors can generally be said to be concerned with the problem of creating a subsisting learning environment for students.

A cursory look will reinforce the fact that much has been written concerning school media centers, but little has been said about the smaller learning center. Although most of the books tend toward center organization that is much too inclusive to be considered appropriate in a small approach, the suggested organization, ideas, equipment, and materials reflect basics that can be used to direct any sized center.

Perhaps the reason so little has been written concerning small centers is simply because the small departmental learning center is an innovation of the middle 1970s and not the 60s. It was the 60s that brought surging interest in new library concepts, media, and services. From that surge came the rapidly germinating seed that any facility whose function is to promote learning should be designed, constructed, and directed around the theory that inquiry, self-direction, and independent study must be based on a trust in student ability to carry through a self-directed and teacher-directed study program. But only lately has it been found that independent learning can take place in small niches within a single classroom, in addition to large multi-discipline media centers.

Although Karwin (1973) deals mainly with off-campus facilities for part-time students, he makes a valuable point in describing learning centers—whether large or small, "The learning center is. . .regarded as a support facility. As such, its design should spring from the nature of the instructional program it is intended to support, rather than from a series of

speculations, however carefully made" (Karwin, 1973). It is absolutely necessary to consider the type of services and instruction that a learning center must offer, no matter at what point the center begins to function. If the learning center is intended to be a successful one, it must lean toward meeting expressed or implied needs of learners and teachers (Horton & Horton, 1973). A one-discipline department, whether in a secondary school or college, should be especially cognizant of all needs, and any learning center certainly should reflect that awareness.

It is true that learning centers are relatively new on the educational scene, but the traditional concept of giving the learner some help other than classroom chatter and someplace else to obtain information is not a new idea. "A publication of the Ministry of Education in England records a statement from Ashton's Ordinances at Shrewsbury in 1578 that building should include 'a library and gallerie for the said schools furnished with all manner of books, maps, spheres, instrucments of astronomye and all other things appertaining to learning . . . ' " (Davis, 1974).

Progressiveness is not limited to other countries. Ben Franklin included a plan for a library in his Academy in 1740, and in 1835 the New York State Legislature passed a law allowing school districts to use tax monies to set up libraries. Very few districts wanted to bother, however, until the far-sighted legislature instituted more appealing financial support. Other state legislatures followed suit and by 1876, some 19 states had laws to help promote libraries (Gillespie, Spirt, 1974).

About 300 years ago Comenius suggested that it is the student who matters most in the educational process. He noted that learning is generally accomplished BY a person, not TO a person (Enright, 1972). From this novel idea, educators began to become aware of the student as an individual, with certain differences that are far more numerous than the similarities found in all students. Hence, the ideas of individualized learning and places to promote that learning have become rampant.

Rampant, because some educators and institutions jump into individualized and independent instruction because it is

vogue and without the needed research and proper planning. It is very well to theorize a student into performing at his/her own level, but it is an entirely different matter to actually implement that theory. Therefore, any selection of a specific program, including media and services should be prefaced by desired objectives. Too many times learning center activities, media, services, and materials are chosen without a comprehensive study of the students who will study in the center and what they will study, without thoroughly understanding how learning takes place and the nature of experiences necessary if learning is to be meaningful, or without even being aware of the materials that are available (Pearson & Butler, 1969). The point here is that before trying to set up a learning center, think about it.

Most of the resources used in compiling this manual have expressed similar instructional philosophies and a combination of instructional steps to implement those ideas. For instance, one author claims, "There are three ways of reaching students—presentation, interaction, and individual study. All three can be effective and should be used in combination to create the most conducive learning environment" (Gunselman, 1971).

Another expresses his ideas concerning student learning through an actual competency-based approach and puts the majority of the learning responsibility upon the student. The student learns from his own behavior and not particularly from the instructor's behavior. The instructor becomes a manager of learning and the student becomes active rather than passive (Brown, 1973).

Kinder suggests that instructors, as important and necessary facets of the learning center, have certain obligations. Instructors should

- —return materials promptly
- —share and contribute ideas
- —observe rules and regulations
- —help evaluate materials and services
- —take proper care of equipment and materials (Kinder, 1973).

These points are good advice for both instructors and students who use the center. Users may not always agree upon the final philosophy or objectives of a learning center, but those who accept the idea of student directed and independent study, must observe the guideline that no learner or instructor may deny other users the right to the best materials and equipment in the center.

Included in the following references, then, are those authors to whom credit must be given for many of the concepts and ideas that are presented in a much mutilated format within this manual. For comprehensive bibliographies for further research and study, check the extensive sources within each author's subject scope.

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CHART I
Appendix B

Present State	CHARACTERISTIC / Activities	Large Group Application — Decision Makers					Small Group Application — Decision Makers					Individualized Application — Decision Makers					TALLY
						Developer					Developer					Developer	
	Minicourses																
	Games/Simulation																
	Computer-Based Learning																
	Computer-Based Testing																
	Programmed Learning																
	Group Discussion																
	Tutorials																
	Roleplaying																
	Case Studies																
	Brainstorming																
	Sensitivity Training																

CHART 2
Appendix C

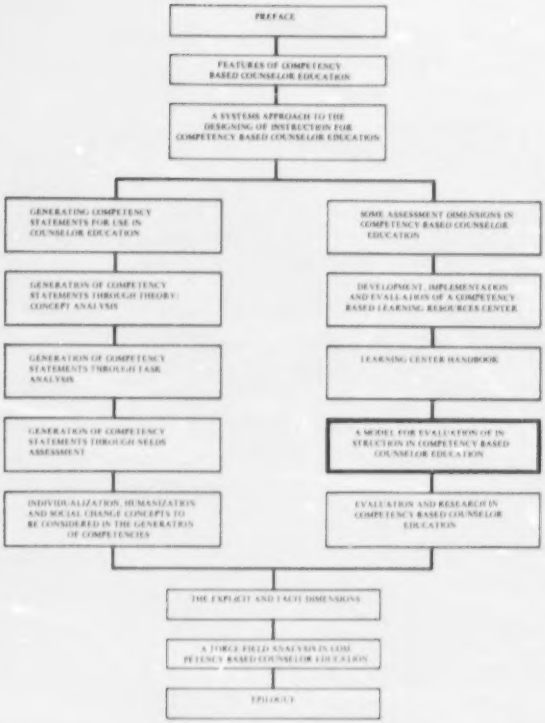
Present State	CHARACTERISTIC	Large Group Application					Small Group Application					Individualized Application					TALLY
	Facilities	Decision Makers					Decision Makers					Decision Makers					
						Developer					Developer					Developer	
	Circulation																
	Open Access																
	Materials Housing																
	Listening & Viewing Area																
	Studying & Learning Area																
	Administration Area																
	Work Space																
	Storage Space																
	Professional Collection																
	Reserve																

Appendix D
CHART 3

Present State	CHARACTERISTIC	Large Group Application					Small Group Application					Individualized Application					TALLY
	Resources	Decision Makers				Developer	Decision Makers				Developer	Decision Makers				Developer	
	Games/Simulations																
	Audiotapes/Recordings																
	Videotape																
	Filmstrips																
	Slides																
	Visual Materials																
	Films																
	Multimedia Kits																
	Manipulative Material																
	Print Materials																

A Model for Evaluation of Instruction in Competency-Based Counselor Education

Robert H. Ragatz


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY: CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

A Model for Evaluation of Instruction in Competency-Based Education

Robert H. Ragatz
Indiana University

The primary purpose behind evaluation of instruction is to obtain information pertinent to modifying both the objectives and the procedures of instruction. What we are proposing here is a model for such an endeavor, a model designed to effect accountability in the sense of increased individualization and personalization in meeting student needs.

Although this particular evaluation model was developed in conjunction with a course on Individual Appraisal which is offered in a Department of Counseling and Guidance, we believe that the model is suitable for application to any instruction which can be structured in terms of competency-based education.

The model proposed here consists of eight sections:

1. Relate competency domain (area) to student's program of study.
2. Relate specific competencies to area.
3. Evaluate relevance of course goals and instructional objectives.
4. Evaluate course effectiveness.
5. Evaluate course efficiency.
6. Monitor completion of evaluation.
7. Evaluate course management.
8. Evaluate criterion referencing.
9. Evaluate course evaluation procedures.

The separate functions and their relationship to each other are illustrated in the flowchart model presented in Figure 1. In the pages which follow each function is described in isolation and in relation to the entire model. And finally, several sample pages from an evaluation instrument developed from this model are attached.

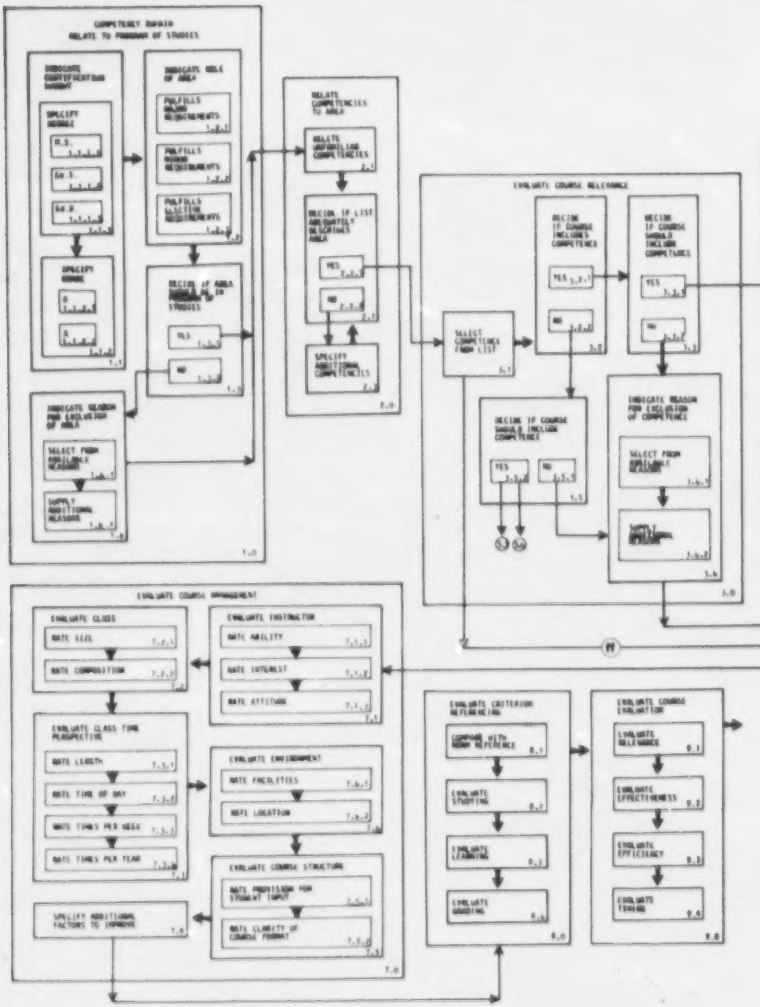
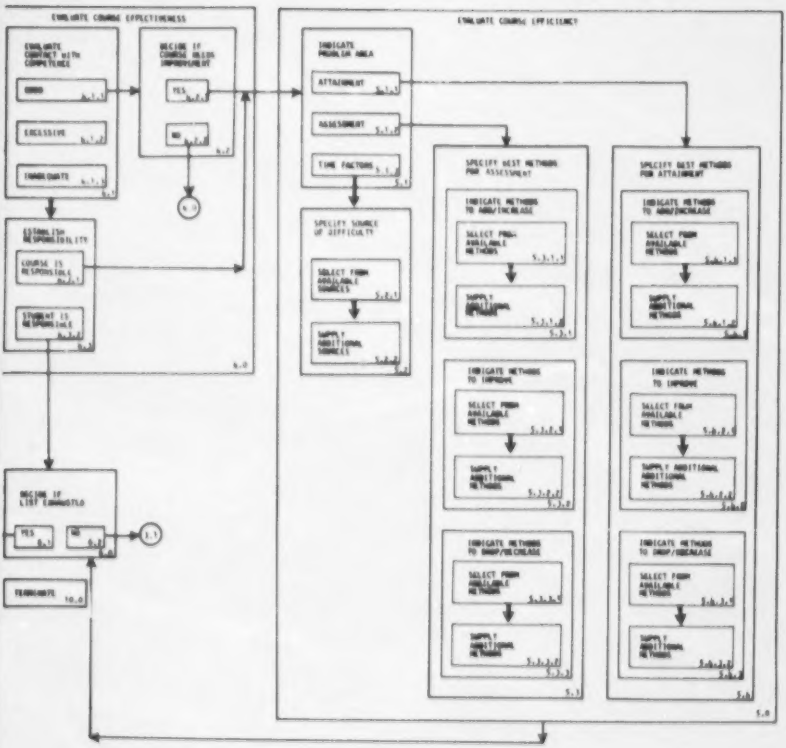


Figure 1. Flowchart model for evaluation of criterion referenced instruction in competency-based counselor education.



1.0 Relate Competency Domain (Area) to Student's Program of Studies

Initially, questions attempt to provide a data base for putting information from the course evaluation in perspective. The student is asked to indicate what degree he or she is pursuing, what grade has been contracted for, and whether the course represents part of the major requirements, minor requirements, or is simply an elective. An illustration may suggest warrant for inclusion of this section. If the course in question were "principles of chemistry," the responses offered by a doctoral student in physics, who had contracted for an "A" and who was fulfilling major requirements, might be regarded differently from those of another student who was a master's level art major who sought a "B" and had chosen the course as an elective.

The next question (of particular importance when the course has been required as part of a degree program) deals with whether the competency domain seems appropriate to the student's program of studies. If it does not, the student is asked to indicate the reason(s) for wishing to exclude the competency domain by selecting from available reasons and/or providing additional ones.

2.0 Relate Specific Competencies to Area

After indicating why the competency domain is regarded as appropriate to the course of studies (or that the domain is inappropriate), the student proceeds to validate a set of competencies which constitute the domain being considered. The purpose here is not (yet) to consider the course in terms of these competencies, but to establish what elements comprise full acquaintance with the domain. The first step involves the student's examining the list of competencies seen as appropriate by the instructor and deleting those which are unfamiliar. Then the list is reviewed for comprehensiveness. If the student is satisfied that the list adequately describes the domain, he or she proceeds to an evaluation of the course itself. If not, the student is asked to itemize the necessary additional competencies and then to continue. This procedure allows the physics

student to indicate for example that while "techniques of quantum analysis" was not included in the offered list, it represents an important aspect of chemical principles. The section does not, however, make provision for the art major to delete "basic knowledge of molecules in industry" at this stage in the evaluation.

3.0 Evaluate Relevance of Course Goals and Instructional Objectives

The next procedure focuses on evaluating the relevance of the course. This is done from the perspective of the set of competencies previously developed. Initially, the student is to select a particular competence from the list. Then a decision is made as to whether that competence was in fact included within the course. In either case, the next question asks whether the competence should have been incorporated in the course. If the decisions indicate that the competence was not present and should not have been included, or that it was present but again should not have been, the student is asked to indicate reason(s) for this exclusion. As with the previous question regarding rationale, a set of reasons is offered and opportunity is made for adding other factors. Such ideas as suggesting that the competence better constitutes a prerequisite to the course, or that it has been mastered elsewhere (in which case the source of contact is requested) are offered at this point. If, however, the student decides that the course did not include the competence, but should have, he or she is asked to specify how best that competence might be incorporated in the course (see the section on efficiency, below). The types of information which might emerge from this section could include the position that the course did contain "glassblowing," but that this did not seem appropriate to the physics student, whereas it did to the art major. Similarly, if the latter felt the need to include "knowledge of the chemistry of paints" in the course, that option is available. Finally, if the student believes that the competence was part of the course, and indeed should be, then he or she proceeds to rate the course's effectiveness with respect to that competence.

4.0 Evaluate Course Effectiveness

The first aspect of effectiveness is seen as contact with the competence. The student's task is to specify if he or she experienced the right amount of contact (in which case the next question asks whether the course could be improved in terms of this competence) or if there was excessive or insufficient contact. In either of the latter conditions, the student indicates whether the responsibility for unsatisfactory contact lies with the student or the course. If the student sees him/herself as being entirely responsible, then he or she is directed to select another competence for evaluation. (Obviously, other data regarding the educational process could be derived at this point; that is not the purpose of this instrument.) However, if the course is held to be in any way responsible for the student's inappropriate exposure to the competence being considered, then the course's efficiency with respect to that competence is explored. Similarly, if at the earlier phase in the effectiveness rating the course was said to need improvement for this competence, the student moves into the section on efficiency. If the student indicates no need for improvement, he or she proceeds to evaluate the next competence. Here, the physics student may report adequate contact with "handling inflammable substances," but feel that there would be a more appropriate way of treating the topic; the art student might rate contact with this as excessive, and cite the course as needing modification.

5.0 Evaluate Course Efficiency

The questions dealing with course efficiency attempt to isolate specific elements of competency-based education which pertain to difficulties in treating the given competence. Thus the student is given the opportunity to select from factors relating to attainment, assessment, and timing in designating sources of inefficiency. In terms of procedures for developing the competence being considered, the student indicates methods which might be added or given greater emphasis, methods which need improvement, and methods which could be deleted or given decreased emphasis. In a format comparable to that employed earlier, the student may select from several methods

listed and/or supply further ones within each category. These methods might include, for example, group workshops, lectures, or practical experiences. Measurement strategies are evaluated within the same framework of increase-addition, improvement, and deletion-decrease, again with selection and/or addition. These methods for demonstrating competence might range from criterion tests through peer evaluation. In the event that the student has decided that a particular competence should be added to the course (above), he or she utilizes the attainment and assessment items to indicate how best this might be accomplished. Sources of difficulty revolving around issues of time also may be considered, again by means of selecting from given problems and/or citing additional concerns. Thus the physics student, for example, might indicate his or her belief that "principles of synthesis" could better be handled with a lecture early in the course, followed by lab time made available later. The art student might contend that assessment of "understanding of organic structures" could be managed through preparation of a brief paper on that topic.

6.0 Monitor Completion of Evaluation

Processing of a competence may be terminated at any of the three stages above (3.0, 4.0, and 5.0), depending on the choices made regarding the competence and the course. Thus, following the treatment of each competence, the student is instructed to consider whether the list of competencies is exhausted. If more competencies remain, the student is instructed to continue evaluating them. Upon completing the evaluation of the final competence, the student undertakes a critique of factors related to course management.

7.0 Evaluate Course Management

The procedural questions involved in this next section are not peculiar to the competency-based learning approach. However, they appear to be pertinent and important within this perspective. The student begins by rating the instructor's ability, interest, and attitude on scales defined by poles of "superior" and "inadequate." Following this, the student

rates the size of the class and its composition. The latter factor is treated in the sense of homogeneity-heterogeneity of both interests and abilities of the class members. Then the timing of the course is evaluated, in terms of class length, time of day for meeting, frequency of meetings per week, and times offered during the year. Next the facilities and location are rated regarding their adequacy and convenience, respectively. The student is then asked to indicate his or her feelings regarding the course's provision for student input in determining goals and practices employed. The next question deals with the perceived clarity of the course format. Finally, the student is requested to indicate any additional areas or factors for improvement.

8.0 Evaluate Criterion Referencing

The subsequent section is particularly useful in gauging the impact of criterion referenced measurement. First the student compares his or her understanding of criterion referencing with that of norm referencing. Then amounts of studying and learning under each modality are rated. The last element of this section is intended to obtain the student's response to grading derived from this system, in terms of satisfaction.

9.0 Evaluate Course Evaluation Procedures

The last phase of the evaluation consists of questions for eliciting the student's evaluation of the evaluation instrument itself. The student is asked to respond to the relevance, effectiveness, efficiency, and timing of the instrument.

Translation of this total evaluation into an actual instrument yields an awareness of its complexity and length. Nevertheless, it is believed that the resultant comprehensiveness and flexibility outweigh these drawbacks. This would be especially true if the evaluation were implemented through, for example, an automated format rather than a pencil and paper inventory.

A Model For Evaluation Of Instruction In Competency-Based Education:

Appendix

The following pages represent samples from one possible format in which this evaluation model might be implemented. They correspond to:

- –Form for relating competency domain (area) to program of studies (1.0)
- –Instructions for evaluation of competencies (2.0, 3.0, 4.0, 5.0)
- –List of competencies (in Individual Appraisal) for student consideration (2.0)
- –Form for evaluation of competencies (3.0, 4.0, 5.0)
- –Scales for evaluation of course management (7.0)

PART I

1. Indicate the degree for which you took this course:

   ☐ M.S. ☐ Ed.S. ☐ Ed.D

2. Indicate the grade for which you contracted:

   ☐ A ☐ B

3. Indicate how you think appraisal fits into your overall program of studies:

   ☐ fulfills major requirements
   ☐ fulfills minor requirements
   ☐ fulfills elective requirements

4. Do you feel that appraisal should be a part of your program of studies:

   ☐ YES–go to PART II
   ☐ NO–go to questions ## 5 & 6

5. Indicate why you feel that appraisal shouldn't be part of your program of studies. Check the reasons which apply:

   ☐ appraisal not relevant to program of studies

   ☐ appraisal not relevant to present work

   ☐ appraisal not relevant to future work

6. Write in any additional reasons:

PART II

Instructions:

The following pages will be used to evaluate specific competencies in the course. Each competency is represented by a letter; the letters and corresponding competencies are listed on p. 4. After you have scanned the competencies (see ## 7, 8, & 9, below), you will need to enter the letters for the competencies you are evaluating in the boxes across the top of each page (i.e., pages 5-14).

Beginning on p. 5, the questions are listed down the side of each page, and are the same on each page. The "RESPONSES" column indicates how each question may be answered. The numbers in parentheses following each response indicate which question should be answered next, if that response is selected. An asterisk (*) indicates that the next competence should be evaluated beginning with the first question, i.e., ## 10.

For questions ## 15, 17, 18, 19, it will be necessary to use the list of variables and corresponding letters on pages 15 and 16.

Begin with question ## 7 and when all of the competencies have been evaluated, proceed to Part III.

7. Read through the set of competencies given on p. 4.
8. If there are any competencies which are unfamiliar to you, cross them out.
9. If you feel that there are any other competencies which should be included in the area of appraisal, add them to the set in the space provided on p. 4.

Questions	Responses	Competencies
10. In your opinion, was the competence included in the course?	YES (→ 11) NO (→ 14)	
11. Do you think it should have been included?	YES (→ 12) NO (→ 15)	
12. How much exposure to the competence do you feel you got in the course?	TOO LITTLE (→ 16) RIGHT AMOUNT (→ 13) TOO MUCH (→ 16)	
13. Do you think the course could be improved in relation to the competence?	YES (→ 17) NO (*)	
14. Do you think it should have been included?	YES (→ 17) NO (→ 15)	
15. Indicate why you feel the competence doesn't belong in this course.	Write in letters for factors from p. 15 (*)	
16. Do you feel this was in any way caused by factors in the course, or only by factors for which you are responsible?	COURSE (→ 17) You (*)	
17. Indicate factors related to mastering the competence which you think should be: - eliminated - decreased - improved - increased - added	Write in letters for factors from p. 15 (→ 18)	
18. Indicate factors related to measuring the competence which you think should be: - eliminated - decreased - improved - increased - added	Write in letters for factors from p. 16 (→ 19)	
19. Indicate difficulties related to the timing of the competence.	Write in letters for factors from p. 16 (*)	

LIST OF COMPETENCIES TO BE EVALUATED

A - Observational methods
B - Sociometric methods
C - Interviews
D - Standardized tests
E - Non-standardized tests
F - One test in depth
G - Several tests
H - Aptitude appraisal
I - Achievement appraisal
J - Personality appraisal
K - Interest appraisal
L - Attitude appraisal
M - Relation of counseling theory to appraisal techniques
N - General factors in test selection
O - Selecting tests for a given client
P - Selecting tests for a given counselor or orientation
Q - How to administer tests
R - When to administer tests
S - Test scoring
T - Interpreting tests
U - Report writing
V - Interpreting tests in an interview
W - Decision making based on test information
X - Familiarity with resource materials
Y - Test construction
Z - Test evaluation
AA - Statistics
BB - Reliability
CC - Validity
DD - Competency based programs
EE - Flow charting
FF - Performance terminology
GG - IAC incentive analysis
HH - ABC motivational analysis
II - Baselining

Write in any additional competenc

JJ -
KK -
LL -
MM -
NN -
OO -

PART III

20. How would you rate your instructor's ability, interest, and attitude in relation to the course?

	inadequate						superior
Ability:	1	2	3	4	5	6	7
	superior						inadequate
Interest:	7	6	5	4	3	2	1
	inadequate						superior
Attitude:	1	2	3	4	5	6	7

21. How would you rate the class size?

	Too large						Too small
	7	6	5	4	3	2	1

22. How would you rate the class composition in terms of interests and abilities of the students?

	Too similar						Too dissimilar
Interests:	1	2	3	4	5	6	7
	Too similar						Too dissimilar
Abilities:	1	2	3	4	5	6	7

23. How would you rate the length of the class:

	Too long						Too short
	1	2	3	4	5	6	7

24. How do you feel about when the class met, in terms of the day, the week, and the year?

	Too early						Too late
Day:	1	2	3	4	5	6	7
	Too Frequently						Too infrequently
Week:	7	6	5	4	3	2	1

Year: Course should be offered:

☐ - fall semester

☐ - spring semester

☐ - summer sessions

Evaluation and Research in Competency-Based Counselor Education

Marva J. Larrabee

PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/CONCEPT ANALYSIS
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
LEARNING CENTER HANDBOOK
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Evaluation and Research in Competency-Based Counselor Education

Marva J. Larrabee
Indiana University

The purpose of this paper is to examine the relationship of research to evaluation within the framework of competency-based counselor education. It is hoped that this effort will specify some of the needs for research in competency-based counselor education, as well as identify problems associated with research strategies. A complete overview of problems and strategies is not within the scope of the paper; rather, the focus will be on several questions relevant to counselor education which have been generated from competency-based teacher education literature.

Historically, evaluation has been separated from the research process as something which is done at the conclusion to determine effects or consequences. Frederick McDonald has proposed that research be looked at as synonymous with evaluation since every research project reveals something about effects or consequences. Thus, by focusing on research questions which need to be answered and strategies for seeking answers to these questions, an evaluation system will result (McDonald, 1975). Perhaps, as suggested, focusing on the important research questions in CBCE will result in a comprehensive evaluation system. Careful consideration of evaluation throughout the entire research process could yield the result McDonald desires.

Perhaps the most basic research question which must be asked is, "What is the nature of counselor competence?" It is sometimes assumed that because counselor educators have lists of descriptions of counselor competencies, the issue of the nature of counselor competence has been resolved. Competency-based educators have been commonly criticized as believing that a list of behavioral descriptions of competence constitutes a description of competence. Evidence of performance of a number of specific behavioral acts designated as competencies could be synonymous with competence, but not necessarily (McDonald, 1974a, b. It appears that the definition of counselor competence may be limited to exercises in semantics. Perhaps,

we also suffer from this criticism commonly directed at competency-based teacher education. What then is counselor competence, if it is not a detailed list of activities which a counselor has performed?

The question of the nature of teacher competence has been designated as the most important question in teacher education by McDonald (1974b). Intuitively it seems that there is no question more significant than what teaching performances produce significant effects on learning. McDonald recommends that teaching competence be defined in terms of teacher effects on pupil learning.

How then is counselor competence defined? It is likely that a definition of counselor competence which centers on the demonstration of a repertoire of specified performances described in behavioral objectives is inadequate. It appears that counselor competence is more logically defined in terms of the counselors' effect on the clients with whom they work. This concept of competence would result in a framework for research addressing the question, what counselor behaviors produce significant effects on client outcomes? The goal of research would then be to identify counselor behaviors which have a direct effect on client change.

Numerous writers in competency-based education literature discuss the importance of outcome measures. Opinions among educators differ regarding the use of outcome criteria for determining competence. It is discussed in the literature using many labels: product criteria, consequence-based criteria, output referenced, and outcome criteria (Weber, 1974). Perhaps the use of outcome measures as criteria for determining competence has been somewhat neglected because of the difficulty of operationalizing the concept. Gordon Paul (1967) seems to have phrased the question which needs to be asked in outcome research appropriately as "What treatment, by whom, is most effective for this individual with that specific problem, under what set of circumstances?" (p. 110).

Two research methodologies have been suggested by McDonald (1975) to deal with outcome research in competency-based education in general. These approaches also appear to be applicable to competency-based counselor education. The inductive-correlational approach would result in analysis of the relation-

ship between counselor performance and client outcomes by naturalistic observation of experienced counselors. It would be essential that this be done with regard to a specific kind of client outcome. The lack of measurement instruments with sufficiently high reliability and validity to adequately measure client outcomes is critical to the use of this approach. The CBCE movement has provided measures of counselor-performance which could be considered adequate; however, the problem of inadequate measures of client outcomes is beyond the scope of this paper.

In a review of outcome research in Bergin and Garfield (1971) it is pointed out that before therapeutic outcomes can be adequately measured, researchers and therapists must begin to think more precisely of kinds of change. In addition it is stated that the problem of imprecision in measuring the experiential or internal change in psychotherapy is a crucial factor in the advancement of outcome research. Multiple dependent variables which are measurements of behavioral as well as internal change are needed. Brief commentaries on frequently used outcome measures are available in this same resource and suggestions are made regarding the measurement needs of outcome research.

With the development of more appropriate outcome measures, it is conceivable that experienced counselors could be observed and grouped along the dimension of effectiveness in producing specified client outcomes. The study of the observed performances of the counselors in the extreme groups along this dimension could then be analyzed. If enough data were gathered, it could result in the identification of the behaviors which discriminate among counselors' abilities to affect a particular outcome. Such correlational studies would reveal hypotheses which could have validity in determining the relationship between counselor performance and client outcomes.

Since correlational strategies will only suggest hypotheses regarding the relationship of counselor behaviors to client outcomes, a second methodology is needed. It is essential that these relationships emerging from correlational studies be tested either by replication of the original study and/or experimental studies. This second method, the theoretical-experi-

mental approach, is frequently used to test hypotheses in counselor education. However, the current discussion will be limited to the use of the experimental method with regard to determining counselor competencies. One type of experimental manipulation requires varying counselor performances to assess their effects on a particular outcome. When studies are conducted under controlled conditions, data are generated comparing the effects of counselor performances, including their interdependence and interchangeability.

Experimental research is conveniently done in laboratory conditions with random assignment of subjects and maximum potential for controlled conditions. Increased interest in experimental methodology used in naturalistic settings has been voiced at a recent conference on Competency-Based Education (McDonald, 1975; Sobol, 1975). This is possible to accomplish in field-based studies using a fractional factorial design. This type of design permits the use of a relatively small number of subjects to test a relatively large number of hypotheses (McDonald, 1974a). Kirk (1972) comments on the advantages and disadvantages of this strategy.

It is conceivable that such studies conducted under field conditions rather than in the university counseling laboratory facilities would improve the face validity of the findings. Although field studies present greater difficulties in control and increased ambiguity in interpretation than laboratory studies, federal funding may greatly favor this type of research in the next few years (Sobol, 1975; Sullivan, 1975). David A. Potter (1974) listed three advantages of a field-based teacher education research program which appear to be applicable to counseling research programs. Constant contact with the field-based practitioners could ensure that the professional training developments are aligned with the realities of the work of inservice counselors. The transition from experimental training settings into effective professional training would also be facilitated in addition to the funding advantages previously mentioned.

If counselor competence is to be defined in terms of effects on client outcomes, the problem emerges of separating counselor effects from the effects of other variables on client outcomes. It

is possible to attack the problem by designing studies so that a wide variety of effects may be studied as mediators of counselor performance. An analysis of interactions of counselor performance with other variables can reveal the kinds of influences which are important to variability in counselor performance. It appears that data would be requested which include the dimensions of the question formulated by Paul (1967). Specifically, studies would include as variables treatment, counselor behavior, client's specified problems, and circumstances, as all relate to client outcome.

Experimental studies of single behaviors often produce insignificant results in behavioral research. In teacher-education research, McDonald (1975) states that any single teacher behavior rarely accounts for more than ten percent of the variance in student performance. Some methodologists are suggesting that researchers should begin to look at clusters of performances which will account for larger portions of variance in outcome measures (McDonald, 1975). Perhaps clusters of counselor behaviors can be identified which will account for a larger portion of the variance in specific client outcomes.

Theoretical groupings of behaviors in the literature suggest clusters of counselor behaviors which can be researched in addition to those clusters which might emerge from correlational studies. Multivariate statistical methodology now enables the researcher to analyze multiple dependent variables greatly expanding the possibilities for experimental designs. It is apparent that the cautions to limit the number of variables used in studies to assure adequate controls (Paul, 1967) are of concern, but not as restrictive as once thought, due to advances in research methodology. The availability of new statistical techniques and utilization of computer capacities provides facility for analyzing extremely complex designs.

Figure 1 illustrates the nature of a comprehensive approach to defining counselor competence which utilizes the recommendations of McDonald (1975) in a presentation to competency-based educators. The figure suggests that ideally clusters of counselor behaviors from either correlational studies or a theoretical base would be experimentally tested in both naturalistic and laboratory settings.

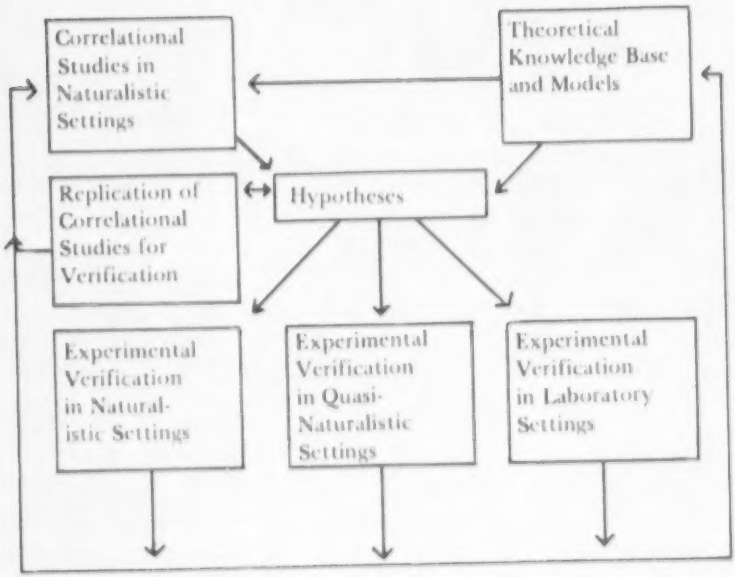

Correlational Studies in Naturalistic Settings
Theoretical Knowledge Base and Models
Replication of Correlational Studies for Verification
Hypotheses
Experimental Verification in Natural-istic Settings
Experimental Verification in Quasi-Naturalistic Settings
Experimental Verification in Laboratory Settings

Figure 1. A comprehensive approach to research in competency-based counselor education.

The ideal verification procedure appears to be experimental studies which would be conducted in naturalistic, quasi-naturalistic, and laboratory settings to test the same hypotheses. As hypotheses are verified a cycle of input into refinement of correlational studies or revision of the theoretical base completes the diagram. With new input the process of hypotheses generation is stimulated reactivating the procedure. New hypotheses generate more experimental research resulting in more input, stimulating this process. The figure also includes a small cycle within this larger framework representing replication of correlational studies. It is symbolic of a verification procedure for correlational studies by which some relationships

between variables can be demonstrated. This procedure allows elimination of some hypotheses when very weak relationships appear consistently. Utilization of these means of hypotheses generation and verification is a comprehensive approach. Although it is presented here as a model, McDonald (1974a) views the hypothesis-generating, hypothesis-testing life style as a pattern which should characterize the development of the competency-based movement.

The emphasis of this portion of the paper focuses on the need for research to describe the nature of competence. However, the problems of the task should not lead one to believe that our efforts to intuitively or theoretically describe competencies for counselors are not worthwhile. This discussion would serve as a reminder that our lists of objectives need to be validated in relation to client outcomes. Competencies listed in behavioral objectives are often thought to be of great importance in enabling a counselor to affect positive change in clients. Perhaps beginning to verify our notions of competence will lend support to competency-based programs.

Counselor education has assumed that a causal relationship exists between certain patterns of counselor behavior or performance and change in the client. The development of professional training programs appears to be dependent on the continuous development of empirical evidence describing the nature of the linkage between counselor performance and client outcomes. There are a great many possibilities for speculation as to what the nature of that relationship might be like. The procedure of setting criterion levels for competencies in fact assumes the structure of the relationship between competence and outcomes. Arbitrary cutting scores on performance measures symbolize the point above which one is competent. Persons failing to reach that point are considered to be inadequate in performance. Since current procedures are arbitrary, it appears that the assumption in operation could be stated, the better a counselor's performance, the higher the likelihood of client change. A research question is implied in this assumption. What level of counselor performance symbolizes competence in relation to client outcomes?

The assumption stated above could be described as a linear relationship between counselor performance and client outcomes, as illustrated in Figure 2.

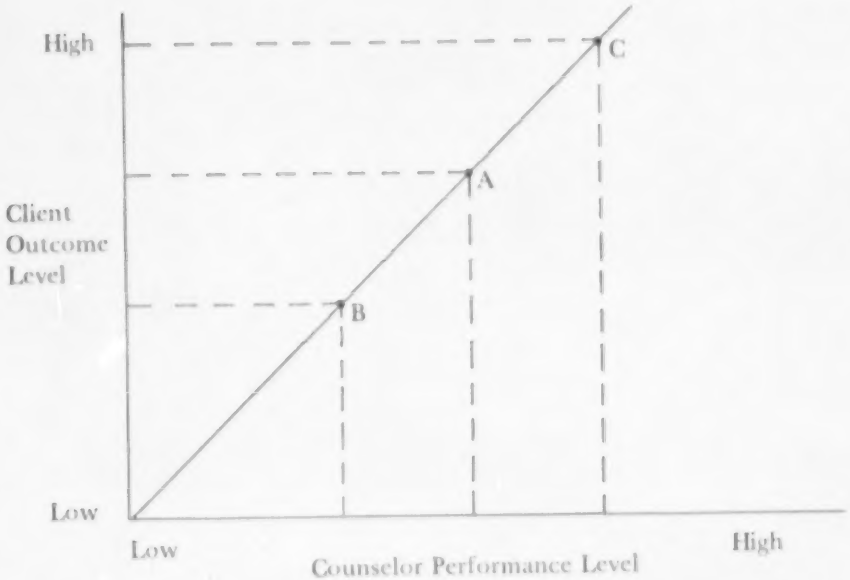


Figure 2. A model depicting a linear relationship between counselor performance and client outcomes.

The horizontal axis represents the dimension of counselor performance which increases with movement to the right. The vertical axis represents client outcomes and could indicate degree of change increasing with movement up the axis. The linear relationship would assume that for each increase in counselor performance there is a corresponding increase in client outcome or change. A series of points representing the maximum number of possible performance scores to be measured are graphed as a straight line through points B, A, and C. Point A symbolizes the criterion level separating competent from inadequate performance. It follows that if a counselor's performance is lower than the specified level (symbolized by point B),

the corresponding client outcome level would be too low. Thus, the performance is not producing the desired effect and would be labeled as inadequate. Likewise, if the counselor performance were higher than the cutting score (symbolized by point C), a superior performance is indicated, corresponding to a more desirable level of client outcome. Many counselor educators may operate as if this were true, although it does not appear necessarily logical when simplified in this manner. It is difficult to imagine that counselor performance which is so complex could be organized in this way, but a criterion score generally assumes linearity.

Perhaps it would be more clear to visualize Figure 2 as illustrating the relationship of counselor experience to the probable change in a particular type of client. For example, it is feasible that a counselor who has never worked with a parent of a mentally retarded child might be limited in skills which could be linked to change in that client. In contrast, accumulated experience working with clients who have this characteristic is thought to result in more knowledge about the phenomena. If more knowledge about the client's problems and characteristics is likely to improve the outcomes of the counseling, a linear relationship is implied. Movement to the right on the horizontal axis of Figure 2 would symbolize increased counselor knowledge as a function of experience with similar clients. The lower level of experience corresponds with a less desirable outcome on the vertical axis. Likewise the higher levels of experience correspond with respectively higher levels of outcome (symbolized by Points A and C).

Perhaps the idea of experience actually being related to client outcome linearly is suspect, considering your own knowledge of counseling and counselors. The example illustrates an assumption that may not be borne out in reality but is implied by some procedures in counselor education. If there is some doubt that the actual relationship between counselor performance and client outcomes is linear, what are the other possibilities? Perhaps it would be easier to conceptualize the relationship between one counselor behavior, skill, or competency and a specified client outcome in illustrating another

pattern of relationship. In fact, criterion or cutting scores often symbolize a specific skill which is assumed to be related to the counselor's effectiveness in producing certain client outcomes. If it is assumed that each increase in a counselor performance produces a corresponding increase in outcome, the relationship would be linear. If this does not seem likely, a different assumption can be explored.

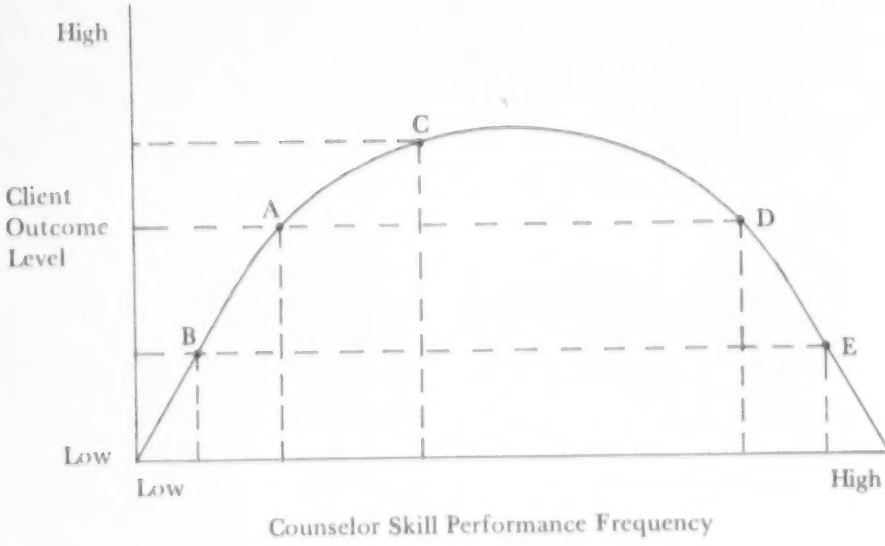


Figure 3. A model depicting a curvilinear relationship between counselor performance and client outcomes.

Figure 3 illustrates another type of relationship between a counselor skill and proposed outcome, curvilinear in nature. Point A again represents a criterion score separating competent from inadequate performance. Point B corresponds to lower counselor performance and client outcome level, while Point C indicates superior levels of counselor performance and client

outcomes. If only the first three points are considered, the relationship looks similar to Figure 1. As an illustration, imagine the skill of paraphrasing aligned with the horizontal axis and the broken lines intersecting the axis symbolizing increased usage of paraphrasing. Broken lines corresponding with the vertical axis indicate increased levels of client outcome. A linear relationship producing higher levels of client outcomes is evident from point B to C, similar to the previous figure. However, it is conceivable that further increases in paraphrasing may produce negative responses in the client (lower productivity or less desirable outcomes) rather than continued increases in outcome levels. According to Figure 3, the continued increase in performance frequency corresponding to Point D appears to lower the client outcome level corresponding to the criterion level (Point A), representing an actual decrease in outcomes. It could be speculated that continued increase in performance frequency (Point E) may lower the client outcome within the inadequate range corresponding to Point B. In relation to the paraphrasing skill, it might be concluded that usage of the skill beyond a certain point is counterproductive with regard to client outcomes. If such a relationship did exist between a counselor behavior, skill, or performance and client outcomes, a single criterion score would not be adequate. A range of scores between points A and D would symbolize competence in this case. All higher and lower scores would be deemed inadquate performance. Not knowing whether the actual relationship between counselor performance and client outcomes might be linear or curvilinear presents problems in knowing how to evaluate counselor competence.

The research problem of determining the nature of competence and the evaluation problem of determining the criterion of a good performance appear to be identical. The essential evaluation question becomes a research question: what is the criterion for any good performance? If the relationship between performance and outcome were established by adequate empirical evidence, criterion levels would have significant meaning. A procedure to be used for setting meaningful cutting scores is illustrated in Figure 4, based on the probable researched relationship between performance and outcomes.

As the first step in this procedure, the desired level of client outcome (Point O) would be selected. Next, moving along the broken line to the intersection of the graphed relationship between performance and outcome, Point A appears on the solid line. Working backwards down the broken line, one can locate the level of performance which would be required of the counselor to produce that effect (Point P). Figure 4 differs very little from Figure 2 if the nature of the performance-outcome relationship is linear. However, perhaps that relationship for a particular skill were like the graph in Figure 5. Low levels of a particular skill appear to have little or no effect on outcomes.

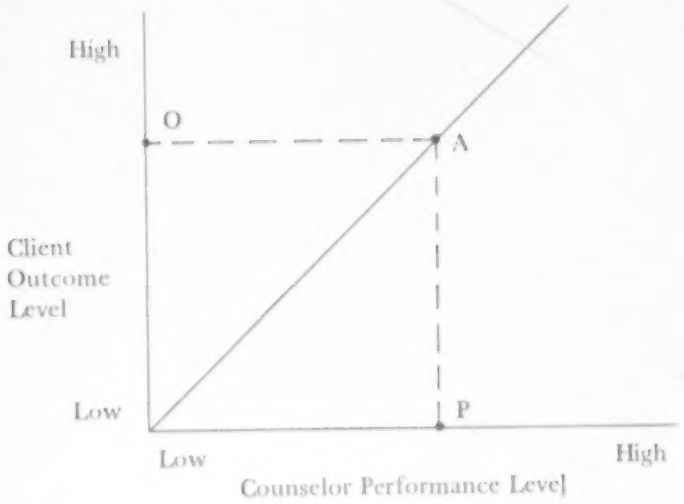


Figure 4. A model for setting criterion levels based on a linear performance-outcome relationship.

An example of this type of relationship might be provided out of group counseling theory. Perhaps a counselor's modeling of intimate verbal behavior in a group is a skill which might fit the graphed line of Figure 5. If the horizontal axis were labeled

as frequency of modeling statements of intimacy, it appears that a counselor's low levels of this behavior might have relatively no effect on the outcome level or behavior change. However, repeated modeling may show some effect on the outcome level. As clients are exposed to an accumulation of the skill, at some point they assimilate the concept and client behavior change is rapid. In this case, Point O in Figure 5 symbolizes a designated level of verbal intimacy with peers which would be a desired outcome of group counseling. It appears that the

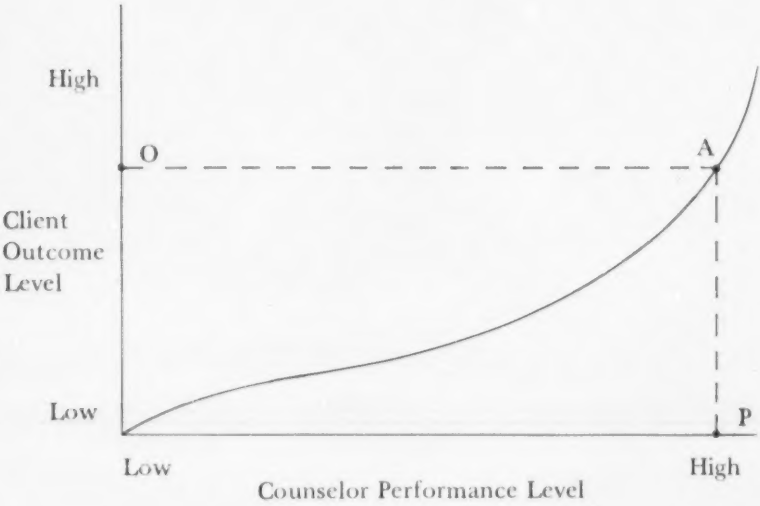


Figure 5. A model for setting criterion levels based on a curvilinear high-performance low-outcome relationship.

counselor would need to model high levels of the verbally intimate behavior (symbolized by Point P) in order to raise the client outcome level. Once a specified level is reached, outcome gains appear to be rapid. Working backwards from Point O to Point P, the criterion level or cutoff score (Point A) would be set in a manner similar to Figure 4 in order to be meaningful.

Performance below that point would be considered inadequate since client outcome would be beneath the desired minimum level.

Another type of relationship exists in Figure 6 which is quite different from Figures 4 or 5. In this figure it appears that very little increase in counselor performance (Point P) produces rapid change toward the desired client outcome (Point O). Thus, the required performance level in this case would be much less than in the examples in Figures 4 and 5.

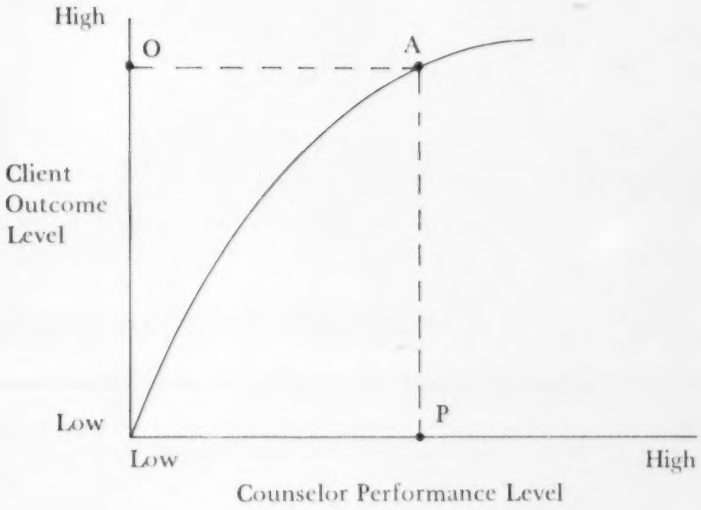


Figure 6. A model for setting criterion levels based on a curvilinear low-performance high-outcome relationship.

To provide an illustration of this kind of relationship, outcome level will be broadened to include the client population a counselor serves within a work setting, rather than a single client. The particular counselor skill being considered as an example is counselor interpretation of standardized test

results. The counselor's communication of stanine scores on an achievement test could be considered as a low level of performance on the horizontal axis of Figure 6. However, the result might be a high level of client awareness of current achievement as reflected in the particular measurement instrument (symbolized by Point O). If such a relationship were established, the outcome level (Point O) could be set first. Working backwards, one would arrive at the level of counselor performance which would be necessary to produce the outcome effect. Point A would then designate an acceptable criterion score on a dimension of test interpretation performance. Since the graph levels off as it passes Point A, it might be assumed that further technical interpretations of stanine scores would have very little effect on student awareness. In this case, Point A may represent a minimum level of performance designating competence. However, it also represents a maximum level of competence.

Criterion for adequate performance may continue to be set arbitrarily in CBCE, and the percents, frequency counts, or raw scores continue to be meaningless in reflecting actual competence. Presently the competency-based education movement sets levels arbitrarily because there are no other options (McDonald, 1975). Numerous problems contribute to the difficulty of changing the approach to the establishment of meaningful criterion levels. Among them are the inadequacies of measurement instruments (Kay, 1974), and lack of agreement as to the feasibility of using consequence criteria in prediction of competence (Weber, 1974).

An additional problem contributes to the complexity of determining counselor competence. It could be possible that the effects of counselor performance on client outcomes are not consistent over differing client types as Paul (1967) suggested. Therefore, a performance-outcome graph similar to those previously illustrated (Figures 2-6) would differ according to the type of client with whom the counselor works. Another research question then emerges. Are there performances which are effective with one type of client but could be ineffective with another type? Confirmation by empirical

evidence would necessitate a more complex representation of the meaningful criterion levels. Three dimensions would be necessary for representation of the relationships, as is illustrated in Figure 7. The dotted line along the left side of the figure

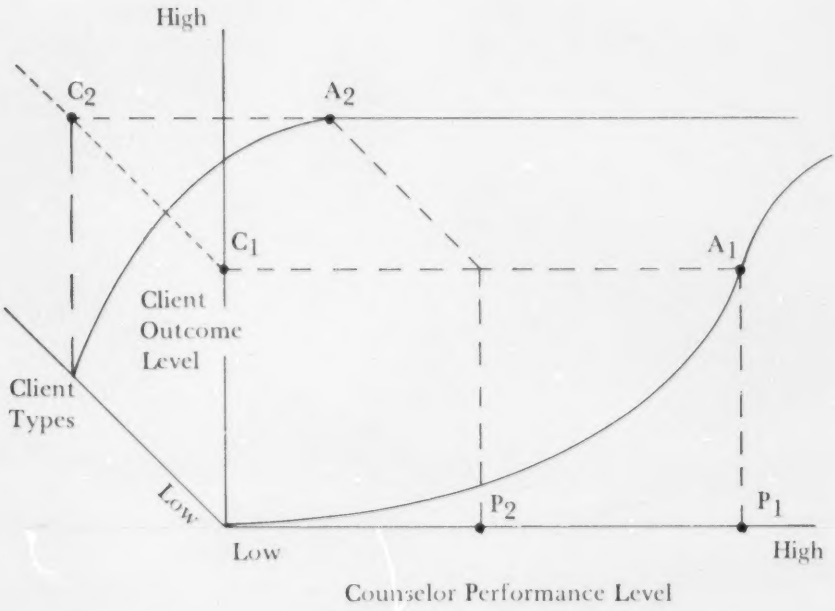


Figure 7. A topographical model for setting criterion levels based on performance-outcome relationships mediated by client types.

represents the level of desired outcome which is shown as constant for each client type. The first client type (C_1) in the diagram is similar to previous illustrations. To locate the competent counselor performance level for this client type, begin by following the broken line to the right until it intersects the plane representing the performance-outcome

relationship. Point A_1 symbolizes the meaningful criterion level, since the corresponding point on the counselor performance axis (P_1) would indicate the level of performance required to yield the desired outcome. Next the criterion level for a second type of client (C_2) would be located further back on the plane. Perhaps this type of client reaches the desired outcome level differently as the performance outcome graph indicates. In this case client outcome increases at a higher rate with each increase of counselor performance. Using the same procedure of following broken lines the criterion level (A_2) appears to be reached when the counselor has emitted lower levels of the particular performance (P_2). Although the concept is difficult to illustrate, it is possible to conceive of a plane similar to geographic typography illustrations, if counselor performance is related to client outcome and client type in this manner.

McDonald (1975) suggests a similar type of representation for the teacher performance relationship to student type and outcome learning. He describes certification of competence as a complex process of evaluating performance in terms of three major dimensions of the teaching-learning process. The first dimension is comprised of categories of pupil outcomes. Differences in persons or pupil characteristics constitute the second major dimension, and teacher performance the third. Such an organizational structure would enable discrimination of the level of teacher performance required to produce certain kinds of outcomes in certain types of pupils. He concludes that this would be the basis for meaningful criterion levels for competence.

Although evaluation of competence is currently arbitrary in competency-based counselor education, the research problem is to set meaningful criterion levels which directly link performance and outcomes. The research and development of an empirical knowledge base is essential to solving the problem of evaluating competence. In counselor education behaviors may be counted or tests given, but how are we to know what these measures mean? Is a score of forty twice as good as a score of twenty? The relationships illustrated in Figures 2-6

serve as reminders that research is a means of seeking answers to the dilemma of certification of competence.

The presentation of a comprehensive approach to research and evaluation in competency-based counselor education to solve the competency dilemma can be overwhelming. A comparison of the present state of research to this ideal approach formulated by McDonald (1975) does expose flaws in current research and evaluation practices. Although we have an obligation to search for the best means of accomplishing the mission of determining what works in counseling (Warner, 1975), it seems inappropriate to negate the contribution of current procedures. In conclusion, it might be helpful to discuss what is feasible to do with this problem, keeping the major factors of a comprehensive approach in mind. Ivor Davies' piecemeal approach to planning presented in an earlier article in this volume appears to be applicable in this case. Perhaps the comprehensive approach presented here can be the handle identifying the sort of thing on which aim would be focused in piecemeal planning. The means available to yield better research results need further examination and trial. The piecemeal planning approach of retuning goals and cyclically reconsidering or maybe redefining means would enable researchers to use current experience instead of negating it.

The final goal is not set, for as methodology advances, ideas expand and ideals are extended. The comprehensive approach described in this paper seems to be an ideal for this point in time. The expansion of empirical evidence regarding the nature of counselor competence appears to be essential now, but is certainly tentative at best. An acceptable current goal has been stated as identifying and defining the persons and methods which are effective with various classifications of clients and classifications of problems. Warner (1975) suggests a very practical step of encouraging replications of studies in doctoral level research which would strengthen the verification of hypotheses previously supported in research studies. Another suggestion would be the replication of laboratory studies in more naturalistic settings. Slight adjustments in strategies

such as this would be a beginning for the retuning described in piecemeal planning. Rather than continuing strategies of the status quo of research practice, relationships between studies would be forming the basis of a more comprehensive body of knowledge. The nature of competence will then have higher probability of being described adequately.

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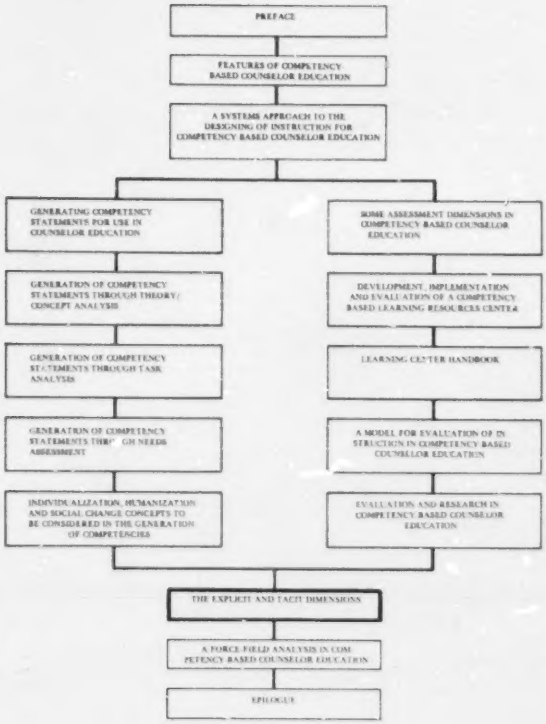
The Explicit and Tacit Dimensions

Ivor K. Davies


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THRO' GH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF IN STRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COM PETENCY BASED COUNSELOR EDUCATION
EPILOGUE

200

The Explicit and Tacit Dimensions*

Ivor K. Davies
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Some years ago, Frances Crick (who won the Nobel Prize for his work on DNA) was asked "How is it that some scientists make a very important breakthrough, whereas the vast majority never really seem to get anywhere?" Frances Crick thought for a few moments, and then replied, "There are many reasons. Sometimes, people are in the right place at the wrong time. Sometimes, they have a faulty piece of information which leads them down the wrong path. Sometimes they don't have the sources that other people have to make important breakthroughs, but," he said, "really, none of these reasons fully account for the phenomenon." He went on, "I believe that the reason so few scientists make a really important breakthrough is that the vast majority of them are not aware of the *assumptions* that they're making."

You know, that's a very interesting point. We often are not aware of the assumptions that we are making, and so we often behave rather naively. Indeed, one of the things that is particularly worrying about competency-based education programs at the present time is that there's an enormous number of assumptions behind these programs. Too often what we're arguing about are really trivial things, when we should be discussing and making public what some of these basic assumptions are. The trouble, I feel, is that educational thought too often acts like a pendulum; it goes from one extreme to another. To a very large extent, the reason that we have the present interest in competency-based education is that there's been an enormous amount of dissatisfaction with what we've been doing in the past. As a result, out of the behavioral objectives movement, out of the movement towards accountab.. ty, there has come this type of model toward which makes competencies public so that people know explicitly what you're doing. In this way, you can communicate your intentions, and can be held responsible, in some way or another, for their consequences in terms of some public type of evaluation.

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*This paper was originally presented at the Second Annual Mutual Development Lab in Competency-Based Counselor Education, Indiana University, May 7-8, 1975.

Unfortunately, we often find in education not only a series of pendulum swings, rejecting the past for the future, but also a tendency to see things very much in one color or the other. So, when we reject things, we often seem to assume that there is really only one way of doing things, and what we must do now is to reject everything that we've had in the past for the fashion of the moment. Competency-based education appears to be one of these fashions. The number of conferences that are being held this summer on competency-based education is almost unbelievable. I think that rather than being encouraged by the number of conferences, we should, perhaps, see a note of warning. In fact, if anything, one of the things we might take note of is that, if there is another emerging trend in education, it's a trend *against* competency-based education. There is, as you know in counseling, a move in education towards humanism. Such a move represents an abandonment of method, and the type of ultra explicitness represented by a competency-based approach to education. To sum up, then, we are suggesting that some of the problems in education stem from the fact that we rarely spell out the assumptions behind what we're doing, together with the related consequences. Secondly, that we tend to see things too much as either/or. We go from one pendulum swing to another, from one extreme to another.

Let us take an example. In 1860, a movement occurred in education with the idea of spelling out a competency-based model for children's education. A whole methodology of analysis was put forward by Herbert Spencer in order to derive out such competencies and from them a curriculum. The movement ultimately collapsed. In 1918 a group of teachers in Indianapolis carried out a wholesale investigation, in enormous detail, of all the jobs in the city of Indianapolis. The idea was simple. Children being educated in Indianapolis schools were going to have to find jobs in Indianapolis, and, so, the curriculum of the children's school, it was argued in 1918, should be based upon the jobs then available. As a result of the analysis, the teachers spelled out a competency program. Again the movement collapsed under its own weight. In the 1920s two important books were published by Franklin Bobbit and Werrett. They spelled out in enormous detail a complete

methodology for constructing a competency-based curriculum. The enourmous weight of competencies and objectives that were generated was so burdensome that the movement once again collapsed and interest flagged. So, in his new book, published in the early 1930s, Franklin Bobbit announced that he was burying the past and was going on to propose a new curriculum based upon the new progressive movement in education.

We have, therefore, seen this competency-based approach before in education. It's not new. We've seen it at least three times before and we certainly shouldn't think that it's something that nobody's tried in the past. In fact, it has been tried, and found wanting. So one of the things that we have to do, if it's going to be successful this time, is to try and find out what can be done to overcome the deficiencies that previously have led to the abandonment of the approach. Detailing long, long lists of competencies is likely to head to yet another failure, as well as wasted effort and resources. The question we have to ask is how can we exploit the past, so as to ensure that this time we can capitalize upon the undoubted merits of the methodology. The issue is simply one of recognizing appropriateness.

All right, then, let's move from assumptions into another area, but carrying the concept of assumptions in our mind. I want us to hypothesize that there are many ways by which someone may know something. It seems to me, however, that in the competency-based movement, there is a built-in assumption that there is only one form of knowing—in effect, that it is possible to make everything crystal clear, that it is possible to define everything in terms of a detailed set of activities. That it's possible, in other words, to construct lists or maps or what-have-you of the competencies which people should realize, and then make them public so that we can communicate with each other. Now, that's an interesting assumption, but it is an assumption. There are, I feel, some instances in which it is not possible to do any of those things. For this reason, I would like to suggest that there are at least two quite different dimensions of knowing that we ought to distinguish or discriminate.

The first dimension of knowing is an explicit dimension. Here we try to make all things clear, and it's along this dimension that the competency-based movement can be found. I believe that a competency-based approach can do a great deal to make things explicit, but there's also another dimension. This is the dimension that is beyond words, a dimension in which it is not really possible to put what you know into words. This dimension of knowing, if you like, is a tacit dimension, tacit meaning "beyond words." I believe that it is possible to know something that you cannot define. I believe it is possible to know something that is beyond powers of description. All of us can recognize a fact, but cannot describe it. All of us know a piece of music, but are unable to hum it. All of us can know a play, but be unable to put into words, in any coherent fashion, what the play is really about. Anything we say debases the experience.

Now, if we accept the hypothesis that there are at least two quite different dimensions of knowing, one explicit and one tacit, then it follows that we shouldn't expect too much from a competency-based approach to education. In other words, the competency-based movement may be making a contribution to one dimension of knowing, but it does not necessarily follow that it is very much of a contribution to the other dimension of knowing. Now, to my mind, this very simplistic notion (that the major thrust of the competency-based education mode is in one area) is an enormously important point. Yet if you explore the literature of the competency-based movement, you will characteristically find the in-built assumption that *everything* can or should be made explicit. There is an idea that whole programs can be characterized in terms of competency statements. I want to argue that many competency statements are indeed extremely helpful, but they have only explored and exploited one dimension. Furthermore, this explicit dimension may not be the most important educationally speaking, nor the most long lasting. Many of you, for instance, have had perhaps three, four, or five years of chemistry. During those three, four, or five years of chemistry, we probably passed many examinations and progress tests. Yet if we were given any of those examinations today, we would probably fail to pass any of

them. Are we going to argue, therefore, that those three, four, or five years of chemistry were a waste of time? That's one possible argument. Or are we going to argue that we know something about chemistry which is beyond the things that I learned in school? For instance, I know what acidity is, but I am unable to define it. I know what a pH ratio is, but I'd be unable to explain to you what it is. Explicitly I don't know, but tacitly I do.

I want to argue that the real carrier of learning is to be found in the tacit dimension, and that a really important ingredient of education is to be found when many explicit things have faded away. What is left is an integrated, personal, form of knowing (an awareness, a perception, an understanding, an appreciation) which is over and above the factual or explicit detail which, when reflected in a list of competencies, is so often sterile, and perhaps meaningless. The worthwhileness of so many of the things that we learn, in other words, is to be found in the tacit area rather than in the explicit one. Just think of the lists of objectives that have been identified for many programs. Just think of many of the lists of competencies that people are postulating for programs in counseling. When you look at those lists, the sterility of them is often the most striking characteristic. The assumption that everything can, and ought to be made explicit is, I think, something that we ought to be questioning. It is certainly one of the most important things that I would like you to carry away from this conference.

All that we're saying is that there are some things which lend themselves directly to a competency-based approach. I think we're also saying that adopting a competency-based model will help us to identify the perimeters of those areas where a competency-based approach may not be so useful or meaningful. That, to my mind, is a constructive and helpful way of behaving. I don't think that we need to be ashamed when we say, publicly, these are some competencies that we're successfully achieving, but there are a series of things (understandings, appreciations, etc.) that we want students to have which we cannot state in the competency mode. I don't think we have to be apologetic about it. But I do think

we have to be truthful about it, and identify those areas where something more is necessary—particularly as these areas may be the more important of the program. Perhaps, these are the areas where group dynamics and a teacher can make a contribution over and above the explicit area which, perhaps could be more appropriately dealt with by independent study and individualized learning. The problem now remains first of recognizing that two dimensions of knowing exist, and then of capitalizing upon them. A competency-based approach capitalizes upon the public or explicit dimension, what is now needed is something that can capitalize upon the more personal or tacit dimension. Something like the police have with their IDENTIKIT, which enables them to build up a picture of someone's face even when the witness claims to be unable to describe someone. The IDENTIKIT strategy, in other words, is nothing more than a means of making tacit knowledge public. What we now badly need to do is search for cognitive and affective IDENTIKITS. Isn't this what counseling and guidance is really about? Now let's just stop here for a moment and consider, if you would like questions or points that you would like to make.

Participant

Seems like the tacit dimension would include characteristics of the student or of the learner, and the way he learns or, perhaps, affective learning, i.e., how much he learns about him self after learning about this. Have those learnings been operationalized at all? I don't want to suggest that this should be another competency and that it should be that way. But have those things been operationalized at all?

Davies

No, I think people have attempted to operationalize some of the processes that go on, but when you start looking at the names that are given to the processes (in terms of a competency-based description) there's nothing particularly unique about them. One can recognize some 30-40 different types of processes, but it's not very helpful in terms of generating competencies. I think, more usefully, what we need to do is to determine, "What strategies can we use to make things explicit?" A good example, for instance, in terms of knowing someone's

face but being unable to decsribe it, is the IDENTIKIT strategy discussed earlier. "Is it this mustache? Is it this nose form? Is it this head shape?" As a result, it is possible to make public things that previously could not be expressed in words. Now, what I think is important is less the IDENTIKIT—that's merely a catalyst—and more the strategy which moves you to make discriminations, to see the differences and to look at the significance of those differences. Now, if we can get rid of many of the lower level activities which can easily be expressed as competencies (and allow students to get on and realize them for themselves), we can then concentrate upon those things that are much more difficult. Things which do not lend themselves to this sort of activity, and in which there can be enormous ranges in terms of individual styles and individual differences. This, I think, is the point that you're making. In order to capitalize on those differences, we need to induce process, not product.

Participant

It's easy, like in talking about counseling training, to recognize effective people, and not be able to produce that person.

Davies

Yes, but I do think that you can train people to be effective, to be professional. A synthesis has to take place, an awareness, a perception, an understanding that they are able to cope with. What we have to guard against is training people in such a way that they are not effective. There are many people, for instance, who are *trained* very adequately as geographers, but who cannot *behave* as geographers professionally.

Participant

One of the criticisms of competency-based education that I hear people raising, especially in counseling, is that there are so few things that are a part of the explicit dimension and such a massive portion that fall under the tacit dimension. To my way of thinking, it's perhaps the mechanism that they've used to get at some of the competencies that's problematic. They've tried one certain thing, and it's gotten them two, or three, and, then, that's all the farther they've gone. The question that I have is,

"What are some of the clues that tell you that you have come to the boundary between the explicit and tacit dimensions?" "How do you know that you haven't just come to the boundary of the method of analysis that you're presently using?"

Davies

I think that the problem is that we're sometimes locked into our methods of analysis. We have a particular method of analyzing a situation, a particular method of analyzing competencies. If you look, for instance, at the literature on "behavioral objectives," you'll find that what's being debated are particular methods of writing or stating those objectives. Mager, as you know, says that every objective must meet four conditions, and unless these four conditions are met, you don't have an adequately defined objective. Gagne and Briggs, in their new book on instructional design, argue for six conditions. Presumably, somebody next year will say that there are eight, and then there'll be ten, and then there'll be twelve. Everybody seems to be arguing about the number of components that you must have in a competency or in an objective, rather than getting at the basic and much more important fundamental matter of "Where do competencies and objectives come from?" This is the issue that is rarely being tackled in the competency-based movement. People are sitting down and writing competencies, which is very nice, but where do those competencies come from? How do they know what the competencies should be? Has God spoken to them? Have they been up to the mountain and brought down, unbroken, the clay tablets? Interestingly enough, when you look at Mager's book on defining objectives, you'll find in the introduction that he explicitly says that his book does not tackle the issue of where objectives come from. Now, I find that interesting, and an author's entitled to limit his topic. But there is no book on the market at the present time that I am aware of, that deals in detail with the critical issue of the source of competencies or objectives. That, to my mind, is the more important question. Much more important than whether an objective or a competency should have four, six, or twenty-four components. Hopefully, this the the sort of thing that we need to start considering, because built into the whole method, built into the whole

competency movement, is the idea that someone, somewhere, sits down and writes the ten thousand competencies of a program in counseling. But how do they identify them? What's their authority? What's their responsibility? There is a real danger here. This is what we have to tackle and criticize, for it could become nothing more than an excuse for complete autocracy. The legitimacy which is given to a list of competencies is such that you might be tempted to try and impose those competencies upon a situation. In fact, demand that they are realized as a standard of adequate performance for licensing, or certification, or anything else. Now, that isn't worrying if you're willing to put up with autocracy. It isn't worrying if you can really be certain that those competencies are legitimate, but the mere fact of defining them doesn't make them legitimate. I have also in-built suspension that it is very difficult to define the competencies legitimately, but that's a different issue. So where do they come from? How do you know what the competencies should be? That's the thing that has to be discussed, explored, and exploited, not the writing of them, and less, the utilization of them. They're important questions but not as important as the assumptions behind the source.

Participant

I have another concern that sometimes I see with teaching reading with children. They've broken down reading into so many component parts, like competencies and word attack skills and vocabulary skills and listening skills, so that there's no mere joy in reading. There's nothing left, and I get the same concern sometimes with competencies. The fact that someone has learned all of them, even if, let's say, we identify the source, we know where they come from, that all of you have is someone who somehow knows competencies. How do you put them all together? I guess, maybe, I get somewhat mystical sometimes, and, maybe, there's something else that takes place in a client-counselor relationship, that, maybe, like you're saying, can't be identified by a competency.

Davies

All right, let's take up your issue because I think that what you've identified is one of the even more important assumptions behind the competency-based movement. In England there's a phenomenon which I don't think you find in this country in terms of popular recreation activities. This is the day trip in a coach to London or the seaside. You will see advertised in the newspaper, "Go to Blackpool for the day—$20.00. Go to London for the day—$15.00, etc." And so, people, particularly in the summer, will go on these trips. Now, in every one, the destination is known. People are going to Blackpool because they want to go to Blackpool for the day. People are going to Rhyl, because they want to go to Rhyl for the day. But there is also another phenomenon. This is also very popular, and involves a phrase that you've probably heard from the Beatles. This is the "magical mystery tour," which involves a day trip to a destination which is carefully not revealed to you. It is simply advertised as a magical mystery tour. The pleasure comes not from reaching a destination, but from the pleasure journey itself. Now this is a very interesting idea for education because we know, intuitively, that there can be great joy in a journey. The destination, the goal, the objective can sometimes be unimportant.

Now, let's take this idea and explore it in terms of the competency model. Now, the competency model really is nothing more than a method of planning. Forget all the garbage. Forget all the technical terms. What a competency-based model is about is a method of planning an educational program. What they're saying is that there is one method of planning which is systematic and which is rational. This method of planning consists of, first of all, defining your objectives, or competencies. That's the first step. Having defined the competencies or objectives, the second step is to identify how the objectives are going to be realized. In other words, thought is given to the means that you're going to use in order to reach those ends. Let me diagram this out, because I think you'll see that although it's a very interesting method, it's not the only method of planning. Along one side of the diagram we have the means, the resources, the things that we have available that we can use

on the journey. Along the other side of the diagram, we have the ends, the competencies, the goals to be realized. Now, we can conceive of a situation in which the means, or resources, are known, as are the goals. In such a situation, there is no real planning problem, because both means and ends are known. We only have a significant problem when the means are unknown and the ends are unknown. This is the situation which the competency-based movement is tackling.

Now, we have a number of alternative strategies when it comes to planning. One first step is to define ends, or competencies. Once these are defined, steps can be taken to identify the means by which they can be realized. Now, this is a good example of *systematic* planning, and you will notice that it is an extremely logical way of proceeding. It seems so very reasonable that you should start off by deciding where you want to go, and it seems very reasonable that having decided where you want to go, you'll then want to decide what you can use to get there.

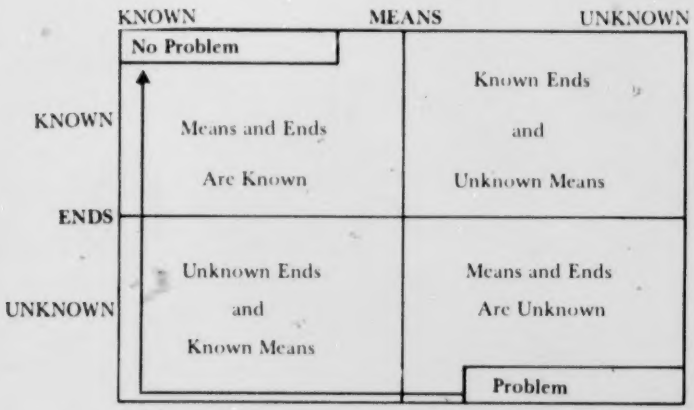


Figure 1. Expedient planning: Moving from "general unknowing" to known means to problem resolution through known ends.

But built into that idea is a very interesting assumption and that assumption is that you have a clear blueprint of the future in which you have great confidence. Otherwise, how could you possibly know what the ends are? The approach is also based upon a revolutionary assumption, since it is a revolutionary approach to planning, which assumes that you destroy everything that you already have, so as to build a new and more successful future.

Another alternative to this kind of planning, of course, is to define first of all the means or resources that you have available. Having defined the means that you have for the journey, you then decide what destination is reasonable or feasible. This is an expedient rather than systematic approach towards planning. You look around to see what you have, and having looked around, you then decide what is reasonable to try to do. Now, that's another alternative, but it's not an alternative that the competency-based movement appears to be seriously considering.

There's also another alternative, and this is *piecemeal* planning. This, if you like, involves a cyclical approach, in

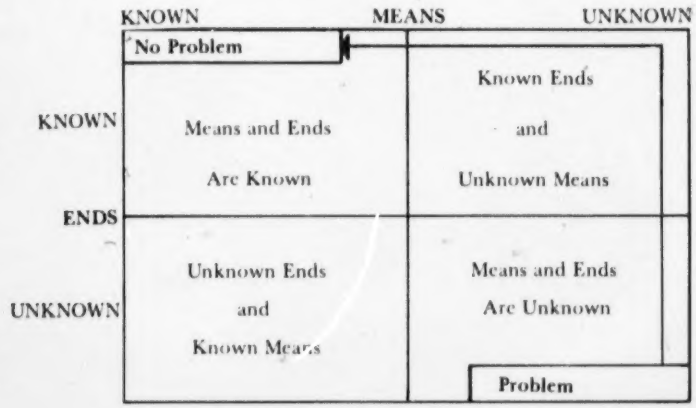


Figure 2. Systematic planning: Moving from "general unknowing" to known ends to problem resolution through known means.

which you try to get a handle to the sort of thing that you want to aim for. Then, you have a look around at what means you have. Then, having decided what your means are, you retune your goals. Having retuned your goals, you go back to the means, and so, constantly, you're feeling your way by successive approximations towards the ideal. Now, it is argued by Karl Popper, for instance, and by Michael Oakeshott, both philosophers, that piecemeal planning has a great deal more to commend it than either systematic planning or expedient planning, because it does not demand a revolutionary reconstruction of the present. It does not demand a denial of all human experience, and it does not demand a blueprint. Now, if you have a blueprint of the future, if you really know what the future is, then there's a great deal to be said for systematic planning. But the competency-based model, as presently conceived, only deals with this one dimension. It appears to ignore the possibility of the other two alternatives. It appears to ignore the expediency planning, and the possibility that a great deal of the joy and pleasure comes from traveling. In some situations, this type of pleasure may be much more important.

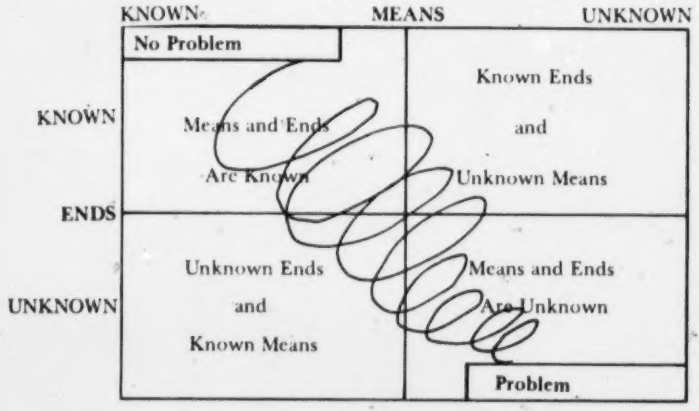
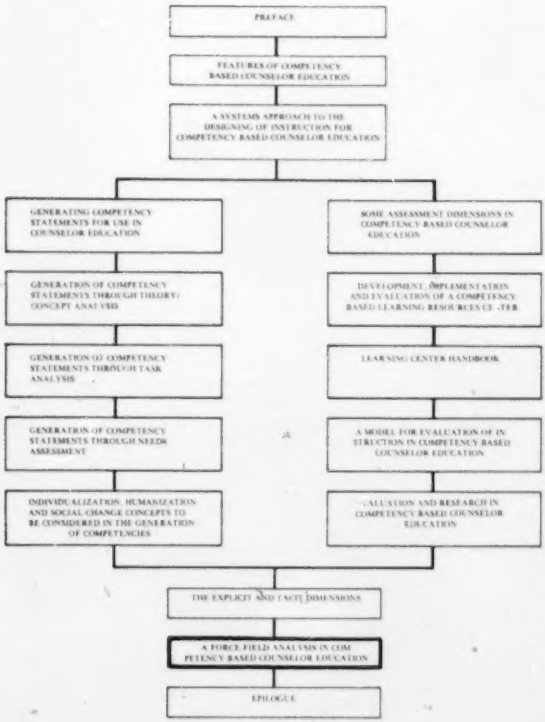


Figure 3. Piecemeal planning: Moving from "general unknowing" to means, to ends, to means, to ends, to means, etc.

So, what we're talking about in the competency-based approach toward education is really a rather specific method of planning. Unfortunately, there appears to be a built-in assumption in the competency-based model, that there is only one real method of planning. I refuse to believe that this is true, but that doesn't mean to say that I reject the competency-based approach. It simply means that the real issue is one of appropriateness, when is one method of planning appropriate and when is another. When this question is answered, we will know when to use the competency-based approach so that we can capitalize upon its rich potential.

A Force-Field Analysis in Competency-Based Counselor Education

Craig Brubaker


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/ CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

215

A Force-Field Analysis in Competency-Based Counselor Education

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A simple review of the major journals in the fields of counselor education and counseling psychology reveals a large research emphasis upon methodology for the training of novice counselors. Behind all of these studies are a number of forces which are pressuring counselor educators to make changes in their counselor training programs. The purpose of this discussion is to present one method for sorting out these forces and looking at them in the light of the Competency-Based Education (C.B.E.) movement. The methodology I am speaking of is Kurt Lewin's force-field analysis (Lewin, 1947).

In force-field analysis any situation is represented in the form of a social system. This social system is made up of a number of diverse parts involved in relationships with each other. It is through the workings of each of these subparts and their interactions that the social system obtains its goal. For the purposes of analysis a social system is conceptualized in the framework of opposing forces in a dynamic balance. For change to occur in any social system this balance must be upset.

I would like now to introduce some basic concepts which are essential for a full understanding of force-field analysis.

Equilibrium

One of these concepts is what Lewin calls a *quasi-stationary* equilibrium. The reason for choosing such a term is evident in each of our lives: a situation in which an observer may see us as having complete control is always full of small peaks and valleys. These are the small fluctuations around this central line of equilibrium. (Represented in Figure 1 by the curving line.) In such a situation the velocity and direction of our movement does remain somewhat constant, but the elements which make up the circumstances are in constant change. We

can say then that an equilibrium is made up of equally strong opposing forces but that the exact make-up of these forces cannot statistically be defined.

In this sense, the peaks and valleys of counselor education can be seen as the day-to-day decisions made by professors in reference to how to conduct their class. These decisions are usually isolated and short-lived so that within a few weeks the class is back to where it started.

Figure 1

Standards

Within any situation there seems to exist a central core of forces which resist any type of change. This central core is made up of *standards* which attempt to regulate the types and amount of movement which will take place. Whenever any attempt is made to behave in a way not in line with the standard, pressure is brought to bear in order to bring the deviation into line. These standards have no relationship to the forces present in the system. Their only purpose is to maintain the equilibrium. The standards for counselor education are different for each situation, so possible ones could be:

1) To get tenure don't rock the boat.
2) This is the way we have always done it.
3) Change makes me nervous.

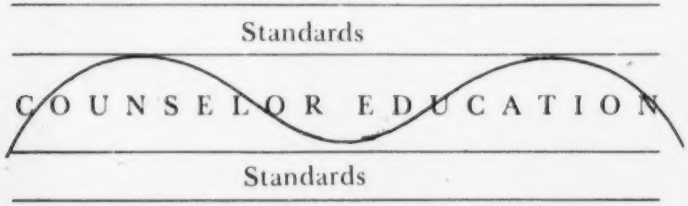


Figure 2

Driving Forces

This is the push in a given situation which attempts to move the system in the direction of an anticipated change. These forces might be seen as specific individuals, organizations, or cultural ideas, but regardless of their form, they are always working towards change in the expected direction. Some of the forces in counselor education which are driving it towards C.B.E. are:

1) accountability
2) Western culture's desire for explicitness
3) Office of Education funding for systematic training programs.

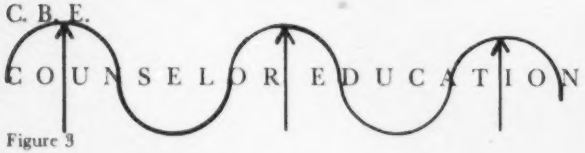


Figure 3

Restraining Forces

This is the opposing push whose purpose is to hold back movement in the anticipated direction. These are not always negative statements of the driving forces. In some cases they are positive statements whose philosophical base is opposite of that embodied in the driving force. Some of the forces in counselor education which are restraining its movement towards C.B.E. are:

1) humanistic education
2) increased emphasis on expediency
3) demand for professor's time.

C. B. E.

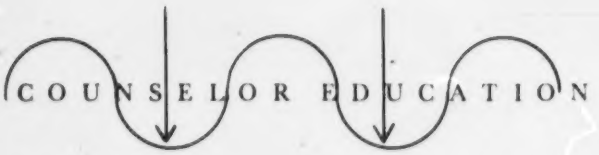


Figure 4

Dormant Forces

These are the forces which are present in the situation but at this particular time are not operating as controlling factors. A dormant force can quickly be changed to a driving or restraining force by any move in the situation. The dormant forces in counselor education could be:

1) those non-committed faculty members
2) students
3) equipment.

Topical Space

This is a group of driving and restraining forces which cluster around one topical area. A topical space shows the relationship between these forces and the aspects of the topical area that they deal with. Each force field is made up of a number of these topical spaces.

C. B. E.

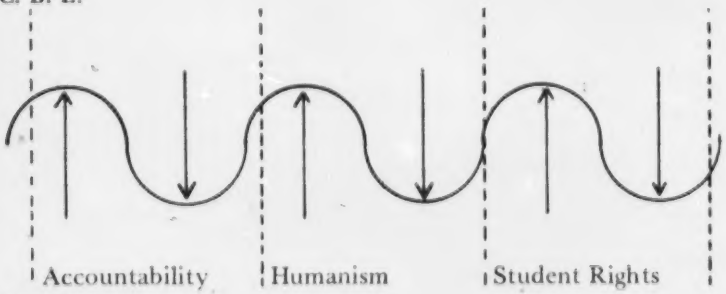


Figure 5

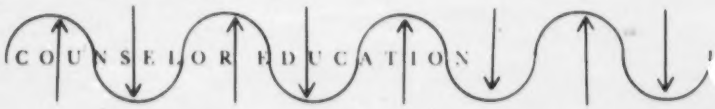
During the recent workshop, Dr. Ivor K. Davies conducted the participants through a force field analysis of counselor education in reference to C.B.E. Figure 6 presents some of the forces identified by the workshop participants:

C. B. E.

Decrease in the funds available to education

Increased emphasis on expediency

Demand for faculty time



Students Rights Movement

Move in education to satisfy individual student's needs

Western culture's desire for explicitness

Accountability

Office of Education's move toward funding systematic training programs.

Figure 6

After developing the preceding terms for conceptualizing a social system, Lewin went on to discuss the change process within these systems. Change, according to Kurt Lewin, can be divided into three steps.

		Equilibrium
I	UNFREEZING	
		Standards
		Equilibrium
II	MOVING	
		Standards
		Equilibrium
III	REFREEZING	
		Standards

In each of these steps there are two levels of concern. One is for the equilibrium and the other is for the standards.

Unfreezing

In this step the change agent is concerned with upsetting the equilibrium and loosening the standards. This stage cannot be fully completed until both of these matters are dealt with. If an attempt is made to disturb the equilibrium without first loosening the standards, the standards will exert extreme pressure upon divergent behavior and the system will soon be brought back to its original level of equilibrium. If, on the other hand, an attempt is only made to loosen the norms with no effort to distrub the equilibrium, the system will exhibit extremes of focusless behavior.

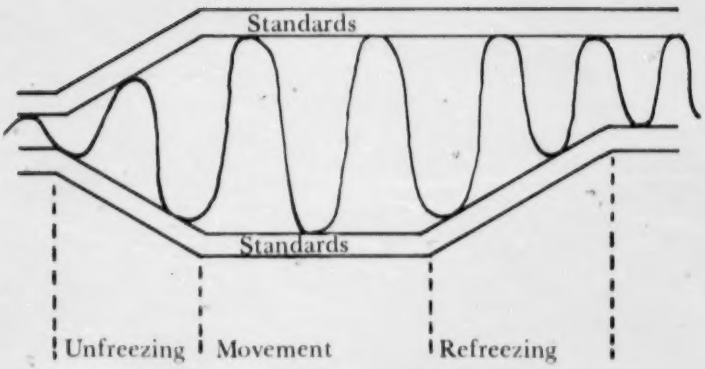
Movement

During the movement step attention must also be shown to the equilibrium and the standards. It is important, if movement is to continue, that the system not be allowed to formulate an equilibrium. It is also important that the standards of the system continue to stay loose. If they start to tighten they would exert pressure on the system forcing it to reach a premature level of equilibrium.

Refreezing

In this third stage it is important that the equilibrium be reinstated. If the system is allowed to continue its movement the ideas which have been worked for will soon be taken over by new forces. A tightening of the standards is also a part of this step. It is these standards which will enable the system to continue to function at its new quilibrium level.

Figure 7



Lewin discussed two methods for bringing about a disturbance in the equilibrium level and a change in the standards:

1) increasing the driving forces
2) decreasing the restraining forces.

Increasing the Driving Forces

An increase of the driving forces can be brought about by the addition of new forces or the enlargement of existing forces. This would cause the system to move in the desired direction. Increasing the driving forces would also add to the amount of tension present in the system. Due to this higher level of tension, the system would experience an increase in the quantity of aggressiveness, emotionality, and instability. This would help to loosen the standards of the system.

It is important that this process be constantly monitored. If the tension is allowed to increase past an optimum level, the system will begin to exhibit fatigue, ineffectiveness, and destructiveness.

Decreasing the Restraining Forces

To decrease the restraining forces, the number or the strength of these forces can be lowered. This will help to lower the tension in the system and the standards will begin to loosen. One method of obtaining this outcome is to increase the involvement of the members of the system in the decision-making process. This gives the entire system a chance to re-develop its standards and to bring out in the open the concerns it has about the change it is experiencing. All factions or topical spaces have a chance for involvement in determining the system's new level of equilibrium.

This process also needs to be monitored. If tension is reduced to a static state, the system will become ineffective. It is also possible, due to the absence of tension, for the driving forces to become dormant forces. This would decrease the total force for change.

Some Concluding Comments

It seems that the Competency-Based Counselor Education movement is stuck in the unfreezing stage of change. The driving forces have been increased and the equilibrium has been shaken but the standards of the profession continue to pull it back down. Whenever the forces for C.B.E. take counselor education to the edge of the area allowed by the existing professional standards, they are pressured to return to the old level by all those arguments for, "Let's stay where we are."

The questions seem to be: are there just reasons for loosening these standards and, if so, what are the methods necessary to increase the tension so this might happen?

If Competency-Based Counselor Education does move from this unfreezing stage, procedures must be developed for continuing the movement and then refreezing the counselor education field when it reaches the appropriate level of equilibrium. To do this, more attention needs to be paid to the process of decreasing the restraining forces and restating a new set of standards.

It is hoped that the preceding pages have presented a methodology for looking at possible change in counselor education in reference to Competency-Based Education. Force field analysis can be a powerful tool for surveying the issues presented at this workshop and any others which might be present in your home setting and determining the environment for change towards Competency-Based Counselor Education.

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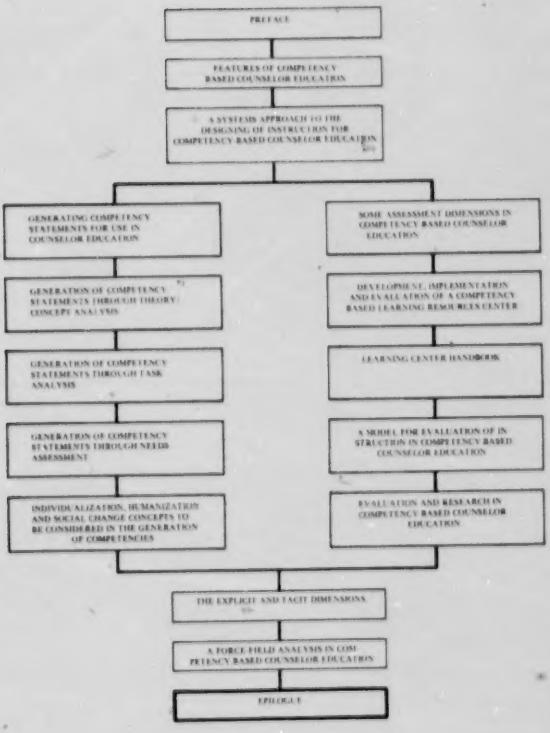
Epilogue

Thomas C. Froehle

Sharon Robinson


PREFACE
FEATURES OF COMPETENCY BASED COUNSELOR EDUCATION
A SYSTEMS APPROACH TO THE DESIGNING OF INSTRUCTION FOR COMPETENCY BASED COUNSELOR EDUCATION
GENERATING COMPETENCY STATEMENTS FOR USE IN COUNSELOR EDUCATION
GENERATION OF COMPETENCY STATEMENTS THROUGH THEORY/CONCEPT ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH TASK ANALYSIS
GENERATION OF COMPETENCY STATEMENTS THROUGH NEEDS ASSESSMENT
INDIVIDUALIZATION, HUMANIZATION AND SOCIAL CHANGE CONCEPTS TO BE CONSIDERED IN THE GENERATION OF COMPETENCIES
SOME ASSESSMENT DIMENSIONS IN COMPETENCY BASED COUNSELOR EDUCATION
DEVELOPMENT, IMPLEMENTATION AND EVALUATION OF A COMPETENCY BASED LEARNING RESOURCES CENTER
LEARNING CENTER HANDBOOK
A MODEL FOR EVALUATION OF INSTRUCTION IN COMPETENCY BASED COUNSELOR EDUCATION
EVALUATION AND RESEARCH IN COMPETENCY BASED COUNSELOR EDUCATION
THE EXPLICIT AND TACIT DIMENSIONS
A FORCE FIELD ANALYSIS IN COMPETENCY BASED COUNSELOR EDUCATION
EPILOGUE

Epilogue

Thomas C. Froehle
Sharon Robinson

Beginning with the 1970-1971 academic year, several Indiana University counselor educators have endeavoured to move gradually from a traditional pre-service counselor education program to a partially competency-based program (Froehle and Lauver, 1970). This attempted changeover proved to be no small undertaking and anything but a smooth one, nor is it anywhere near being complete. Nevertheless, much has been learned from that and subsequent experiences, both from our successes and from our setbacks. Our purpose here is to share with you some of those learnings, realizing, of course, that some of them will have meaning to you only when you experience them yourselves.

Before moving on, however, we should point out that no one outcome should have surprised us. As a matter of fact, had we been more familiar with that vast body of literature on "change" and "innovation," we could have been better prepared to engineer the outcomes we wanted, or at very least, to expect the ones that did develop, whether planned and according to design or unplanned. But the literature on "change" is no easy body to consume. It's expanding geometrically and if one were to want to "know it" before moving on with attempts to change, one would never get off dead center. Now we'd like to return to our suggestions to developers of CBE.

A Practitioner-Scientist Perspective

Any innovation of consequence, even though the hallmarks of that particular innovation may be flexibility and data-based decision making, runs the risk of becoming dogma. This risk is especially evident when the disciples of the innovation lose sight of the ideals which first inspired the innovation and, as a result, treat the dissemination and adoption of the innovation as goals instead of means to reaching a goal. Another threat is created by those disciples who hop onto any band wagon that comes along but never bother to study the rationale that

supports the innovation or the inspiration that gave direction to the birth and development of the innovation.

A positive, nondogmatic approach, as has been suggested by my colleague, Darine Brown (1974), would be to construe CBE and the more specific statements of competencies as "hypotheses to be tested." Using a model presented earlier in this volume, each hypothesis would, first of all, have to be tested against the criterion of relevance or, to use Davies' term, worthwhileness. Secondly, each hypothesis about competency attainment would be tested against the criterion of effectiveness and efficiency. In other words, the practitioner scientist would assess the effect which counselors who possess the competency under consideration have upon client welfare. If the outcomes were worthwhile in terms of client well being, the competency would be retained; however, if the outcomes were not worthwhile, the competency would be modified, measured differently or dropped altogether. The same procedures apply to hypotheses concerning competency attainment. Procedures thought to be cost efficient in promoting individual achievement would be retained only so long as the data support their continued use. If the data suggest that an instructional alternative (I.A. in the Froehle [1976] and Brown [1976] programs) is either not effective or not efficient, it too must be revised or dropped. In both cases, the practitioner scientist is data-based in his/her decision making.

Maintain Flexibility

As stated earlier, a hallmark of CBE must be its flexibility. Both evaluation data generated by local staff and research reported in current literature will suggest needs for continuous change and revision. New developments will suggest that new competencies should be added and others dropped, that procedures for generating evidence of proficiency and for certifying individual competency need periodic modification, and that instructional alternatives need revision as student characteristics change from semester to semester and as technology permits new alternatives. The ideal to move toward is the development of a program where the "design, implement, and evaluate" components reflect the best current research but

where changes in any component can be quickly made as data suggest new developments.

With respect to CBE, "piecemeal planning" as described previously in this report (Davies, 1976) has much to offer. CBE oriented persons are likely to find themselves attracted to the "systematic, ends oriented" planning that Davies describes. However, our experience suggests that day-to-day operations in counselor education do not permit such luxuries. Piecemeal planning appears to be a viable alternative.

Involve Hard Line Faculty and Staff from the Onset

Another type of flexibility to be considered is in regard to the faculty and staff who will be implementing the innovation. Like any innovation in instruction, the future of CBE depends in large measure on the staff who support it; therefore, CBE must be staffed with a chance to succeed. Without these basics, the concept cannot be implemented nor its costs and benefits evaluated. Particularly important in this respect is the involvement of hard line, permanent faculty. CBE is not something that is "installed" and then perpetuates itself, but to a considerable degree, it demands a style of instruction requiring high levels of energy, time, imagination, flexibility, and willingness to change. Staff turnover takes a heavy toll. One way to guard against this turnover is to contract for staff on a guaranteed graduated salary where the year to year increments make it difficult for the individual staff member to move on to better opportunities. The innovation cannot afford to bring another person to the competency level of the former. To counteract this possibility of staff turnover, the positions within the innovation must change so they constitute from year to year that "better opportunity" for each staff member.

Prepare Staff and Students for Their New Roles

Because the learner-instructor roles and the interaction of these roles under CBE are so different from their counterparts in more traditional instruction, orientation and inservice work with students and staff is essential.

Students are likely to experience three areas of difficulty. The foremost difficulty may be in the area of budgeting time.

In CBE, responsibility for learning is placed squarely on the shoulders of the learner, and the practice of self-pacing is generally selected as the technique for individualizing learning. Many students, accustomed to instructor-imposed routine schedules and deadlines, have trouble assuming responsiblility for self-assignment of tasks and budgeting their time wisely. For sixteen or more years of school under traditional instruction, they may have depended upon others to prepare their work schedules and to direct them into specific learning activities over the course of the semester. This causes an end-of-the-semester overload on the CBE facilities, staff, and student well-being. To counteract this tendency, faculty members need to encourage and to help the student become self-motivated and self-budgeted in terms of time management. Once students become accustomed to working within their own time lines, this overload should disappear.

The second area of student difficulty may be adjustment to criterion-referenced assessment at both the cognitive and performance levels. Most students have a long history with norm-referenced testing and grading. For some, the confrontation with fixed minimal criterion levels without the option of "averaging out" over other competency domains is upsetting. This is balanced by students being able to test out or to be certified out of specific criterion areas. For instance, if a student is already competent in an area, there is no need for him to relearn this material. By meeting minimum competency requirements, a student fulfills the criterion for that competency area.

A third area which might present some initial difficulty is that of student-to-student working relationships. No longer are students competing with each other for grades. Rather, they are encouraged to cooperate and learn together. Relieved of the pressure of being evaluated in terms of their classmates, students learn to use each other as resource persons and to benefit from striving toward competency in cooperation rather than in competition.

Maintain Options for Students and Faculty

Our experience suggests that CBE is not for everyone. Some students are clearly not ready for it, nor inclined to become ready. Similarly, it is not a cost efficient instructional model for certain faculty. The changeover may be equally difficult for instructors with successful records in the classroom as for those who enjoy less success. Forced change for both students and faculty will result in less than enthusiastic acceptance and possible program failure. Rather than pressure change, we recommend that documented student outcome be used as the conversion device.

Localize an Area Where the Action Occurs

Unlike many traditional instruction methods, CBE introduces new demands for physical space and learning environments. For example, if self-pacing is to be practiced, it will be necessary to insure open student access to learning resources and criterion assessment. That is to say, the needed resources should be available when an individual student requests them. Similarly, the individual student should be allowed to enter a competency track and schedule entry and exit criterion assessment whenever he/she feels ready for this assessment.

If CBE is to succeed, it is critical that assessment procedures be available when students are ready to demonstrate a competency. This is a revolutionary concept and one that is very difficult to operationalize. We recommend that specific areas by designated as criterion testing sites. Where competency is evaluated through a criterion test, whether it is the paper-pencil type or an interactive test with some type of media (e.g., video stimulus coupled with a paper-pencil response medium), we would suggest a single testing center which would be used solely for that purpose at designated times.

Another monumental challenge in CBE is the record keeping which the model demands. Data-based decision making is a major hallmark of CBE and with this comes data collection and record keeping tasks of considerable proportions—especially when viewed against the more traditional model of instruction. On the one hand, the task is a little much for the

usual instructor grading practice. On the other hand, computerized record keeping might also be a little much, but for two different reasons. First, it would not be cost efficient or even available in some settings. Second, assuming it is available, there is the risk that its excessive use will effect an over-mechanized appearance which may turn off some marginally committed faculty and students. Here it is particularly important to keep the human dimension present and apparent.

Record keeping, management of a learning laboratory, and the distribution and maintenance of learning resources are areas where para-professionals such as student proctors and work/study students can be cost effective when placed under the direct supervision of a professional staff member.

Aspire to Sufficiency But Know When to be Satisfied with the Necessary

In a discussion with a colleague who at the time was serving as the Dean of Research in the School of Education at Indiana University, I was once reminded that no few efforts at innovation had burned out prematurely because of the innovator's insistence upon sufficiency. Her argument was that sufficiency is an ideal with both positive and negative ramifications. An example in the area of counseling and psychotherapy might help to illustrate her argument. It's one thing to speculate about *necessary conditions* for lasting behavioral change in psychotherapy. It's quite something else to talk about *necessary and sufficient conditions* (a la Rogers). The criterion of *necessary* requires only the absence of false positives. The criterion of sufficiency, on the other hand, requires the inclusion of those aspects which guarantee success. In the area of the behavioral sciences, this state of development is seldom achieved, and when it is, it is soon destined to obsolescence due to changing times and situations. A good maxim to follow in CBE is "aspire to sufficiency, but know when to be satisfied with the necessary."

Maintain a Broad Base of Credentialing Agents for Performance-Based Competencies

Lastly, a network of certified credentialing agents must be established and maintained. This is especially critical in the field.

At Indiana University we piloted several procedures and eventually focused on one that seems to be manageable. Students are informed that competencies which employ performance criteria as evidence may be certified by anyone who is approved as a credentialing agent 1) provided their assessment uses the criteria specified for the specific competency under evaluation and 2) provided the student's performance is rated at or above the minimally acceptable standards of performance. Students are also told that this policy applies to current and to past performance or achievement. In practice, this procedure goes something like this: first, the student identifies a competency which he/she believes he/she has evidenced in a professional work setting and then designates a professional from that work setting as a prospective credentialing agent. If the setting and the proposed credentialing agent meet the criteria for their respective inclusion, a letter and the appropriate Criterion Assessment Feedback (CAF) forms are mailed to the approved credentialing agent. The letter advises the credentialing agent that all CAF forms go into a permanent (but in-house) student credential file. Once the credentialing agent receives the CAF forms, he/she may elect to certify the competency or may want to reconsider the agreement to credential the student in a particular competency. The agent may elect not to stand in judgment at all or to generate an evaluation which does not meet the minimum standards for certification on the competency. In such cases, the student is so advised and then encouraged to continue the same approach or to pursue some alternative to certification.

Develop Leadership Through a Program Coordinator Position

Data-based decision making in any instructional enterprise requires the well-coordinated effort of professional and paraprofessional staff associated with a diversity of systems. The various systems in CBE, namely the student record system, the research and evaluation system, the learning resources management system, the assessment and credentialing system, and the program development system bring with them a diversity of personnel with distinct, albeit related missions. All this needs to be precisely and enthusiastically orchestrated.

If productive modulation is to ensue, it is imperative, in our view, that some one person be designated as a program coordinator. That person may elect to go with committee structures for decision-making policy.

The responsibilities of that coordinator would be 1) to interpret policy; 2) to arrange for the implementation of policy; 3) to "trouble shoot" as problems arise; and 4) to stimulate changes in the program as suggested by accumulated data and related evidence.

Most of the suggestions shared to this point could be applied to any setting where the mission is to enable each individual learner to realize his/her professional development goals in the most cost effective manner possible.